

The Electragist

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Vol. 23, No. 7

Official Journal of ASSOCIATION OF ELECTRAGISTS—International

MAY, 1924

RED SPOT

RED SPOT

RED SPOT

A KITCHEN UNIT IN EVERY HOME

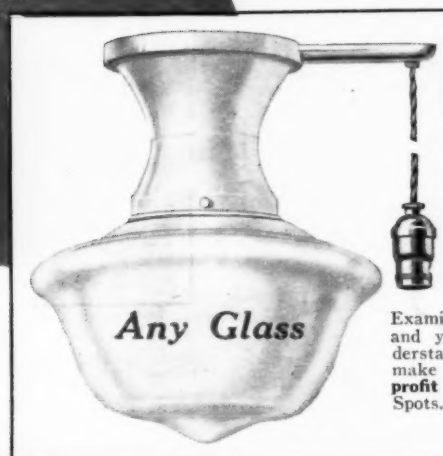
The "Red Spot" Kitchen Unit sells just like any other household appliance—like an electric flat iron, for example.

At first these Units were sold by central station campaigns. But after the campaigns were finished, it was found that the steady, day-by-day sales kept up.

Women want better kitchen lighting. They buy "Red Spots."

In Mansfield, Ohio, for example, almost every house that's wired has a "Red Spot" installed—there were 190 of these wiring jobs last November, and 190 "Red Spot" Kitchen Units were included.

YOU can sell "RED SPOTS" as merchandise.



Examine a sample and you will understand why you make the most profit selling "Red Spots."

"Red Spot" Kitchen Units are designed to meet every condition of service. They are made in two styles—porcelain enamel and painted enamel. The porcelain enamel "Red Spots" are available either with or without attachment for convenience outlet. The painted enamel Unit has knock-out for pull chain control, knock-out for convenience outlet connection, and twist-out for wiremold.

"Red Spots" are built for quick installation. A good man can install one in 20 minutes—one wireman installed 36 in a day. That's because the "Red Spots" are designed right.

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BRASS CO.

125 Walnut St., Vermilion, Ohio

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115 leading electrical jobbers.

Factory stocks with Geo. A. Gray Company,
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RED
SPOT

"Ring and Talk—Don't Walk"



Lamp-Type "Intertalk" Telephone Switchboard System



Pattern No. 1172

RECOMMENDED FOR

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Factories and High-class Apartment Houses where
service is desired between Switchboard and Sub or
Outlying Stations.



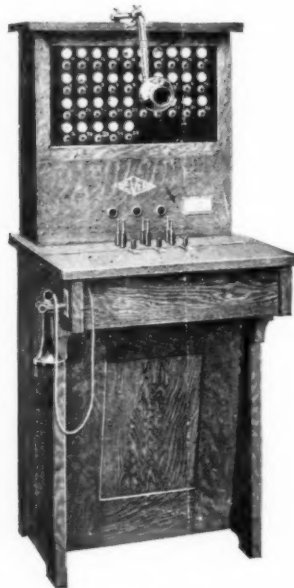
Pattern No. 2530



Pattern No. 257

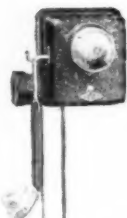


Pattern No. 385



Pattern No. 190

Table Type Lamp Signal Switchboard



Pattern No. 2640



Pattern No. 2524

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The Electragist

Official Journal of the
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Volume 23

MAY, 1924

No. 7

Some of the High Spots This Month:

Follow the Central Station's Campaign. Frank B. Rae, Jr., that erudite annalist of the electrical industry, urges the electragist to get busy and follow up newly created business that's waiting around the corner. Rae's size up of the situation makes mighty interesting reading.

Eliminating Friction is one of the things that the electragist himself will have to do. Clyde Chamblin, executive committeeman from California, tells how they do it in his state. Read it in this issue.

Don't Pass the Buck. This would be a suitable caption for one of the feature pages this month, written by no less an authority than the organizer and first president of the National Contractors' Association—the A. E. I. of today—Charles L. Eidlitz, who looks 'em straight in the eye and tells 'em not to duck. Read it and—don't weep.

Electragists You Should Know. This feature started last month and has received what the highbrows call encomiums of praise from all sources. Gaze upon the classic features of the two portraits presented on another page of this issue, and read the thumbnail sketches of their careers. Of course there are a lot of successful electragists, an occasional example to the contrary notwithstanding.

And There's Lots of Other Good Stuff in this Issue

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Personal Views of the Editor

Radio in the summer? Sure! There's no reason why the radio business shouldn't show an increase every summer. What's more feckless than sitting on the porch all the evening without entertainment? Then there are the summer resorts that should have radio; camp life is dreary without radio; lawn parties, fishing trips, picnics—all should use radio for the purpose of injecting human interest into otherwise drab doings.

And so the radio manufacturers are starting a big advertising campaign in the popular magazines to boost summer sales of radio. Well and good; but why didn't they start intensive advertising in the trade press first? Sell the practical electrical man on the idea and the job is more than half done. Radio engineer dealers are in constant contact with the public, and between them they discuss camping and picnicing, and summer sports, as well as radio.

Radio is mysterious, but advertising is more so to most advertisers. They put the cart before the horse and expect the best kind of propulsion. They sell the public before they sell the salesman. And then they wonder why retailers do not make a mad rush to stock up and tie in with publicity campaigns. "Sell the seller first" is a good motto for some enterprising manufacturer to adopt. The result will be that the seller will help to sell the public—at a largely reduced expense. Thereby some of the mystery of advertising also will be solved.

* * *

Now that the standard symbols for wiring plans have been revised and are being broadcast, it is up to the electrical interests to see that they are put into general use. No two architects or engineers employ the same symbols at the present time. This is confusing.

Draughtsmen should be urged to adopt the new standard. The revised symbols are what might be termed a composite reproduction of all the various symbols now in use. They were compiled and passed upon by practical men. Let the electrical industry insist upon their adoption by everybody.

* * *

An advertisement in a daily newspaper last month read: "When you require the services of a doctor or lawyer you want a man of standing—that you are reasonably sure abides by the established codes of honor in his profession. It is important that you look for the same qualities in the man advising you in the purchase or sale of real estate. The best standard of safety to follow in selecting such a man is to know that he is a *realtor*."

The advertisement further explains that a realtor is a member of a local board affiliated with the National Association of Real Estate Boards, which is an organization directing all of its nation wide resources toward uplifting the real estate business in the matter of honesty and efficiency.

Change real estate to contractor-dealer, and realtor to electragist, and you'll come close to expressing the aims and objects of the Association of Electragists and its trademarked word. Surely the contractor-dealer calling is more of a profession than that of a real estate dealer; hence more comparable to the medical or legal professions. But the realtor is rapidly lifting his business above the old rut—he is proud of his name—proud of his code of ethics. When the electrical contractor-dealer takes the same pride in his code and his name, he will lift his branch of the industry to a point where he will gain the recognition and respect to which he is entitled.—F. J.

How Electragists Can Take Advantage of Central Station Campaigns

BY FRANK B. RAE, JR.

There Are Two Ways of Looking at Certain Activities of the Power Company—One Brings You Satisfactory Profits, the Other Doesn't

Most electragists resent central station commercial activities of any sort, and particularly such activities as overlap into wiring. On that account the recent wave of daylight kitchen unit campaigns has caused a good deal of irritation, and has even led to efforts at reprisal.

But kitchen lighting is only a beginning. Unless all signs fail the central stations are going to follow this plan with others in which they will sell dining room units, bath room units and bed room units. They have found in these campaigns a method of adding materially to the revenue from residence customers. They propose to secure that revenue.

Now in any discussion or controversy it is the part of wisdom to get the other fellow's point of view. You don't have to accept that viewpoint, but you ought to know what it is. If my understanding of the central stations is correct, their viewpoint is this:

First: They are in the business of selling electric service to the public. This means more than simply supplying electrical energy. They believe that they must make it easy and cheap for the public to enjoy to the utmost the advantages of the use of electrical energy.

Second: If and when it becomes apparent that the popularity and use of electric service is curtailed or undeveloped, then it is their right and duty to make use of such proper means of development as come to hand.

Don't Hinder the Public

I think that no fair minded electragist—and most electragists are a whole lot more fair minded than the rest of the industry appreciates—no fair minded electragist is going to say that the public ought to be hindered or restrained in the use of electrical conveniences. To that extent the central stations and electragists are in agreement.

The question is, does the lack of development in certain directions, such as the sale of adequate kitchen lighting, constitute a hindrance? To answer that question, the results of central sta-

tion campaign activities on kitchen units and incidentally the previous history of the *non sale* of kitchen units—are enlightening.

For three or four years certain manufacturers tried to induce the trade to adopt and install a better, larger, higher standard of kitchen unit. It was pointed out that in the average kitchen the contractor or fixturer normally places a \$2 stem fixture into which is screwed a 40 watt or 50 watt lamp. The kitchen operations, many of them, are performed in the worker's shadow; cupboards and the oven interior are dark. To overcome these drawbacks and at the same time raise the illumination standards of the entire home, equipments similar to the present well known daylight kitchen unit were recommended.

The trade as a whole couldn't see it. A few scattered electragists adopted units which gave better illumination than the old combination fixtures, but looking at the proposition by and large, there was no response to the urging for better kitchen lighting.

Central Station First to Sense Need

Then along came a central station and started to "campaign" the proposition. This company found a tremendous market waiting for just this type of unit. In spite of the fact that the units are priced double or three times that of the old style stem fixture, sales were made in every fourth home that had electric service—indeed in some small towns half to three-quarters of the homes were equipped with these kitchen units, and in one case of which the writer has record 86 percent of the homes were sold!

Altogether some sixty or seventy of these kitchen campaigns have been carried on in different parts of the country and conservative manufacturers of the fixtures and glassware used are agreed that not less than \$1,000,000 worth of units, at the retail price, have already been sold. And the market is hardly scratched.

Electragists complain that most of this material has been sold at prices and upon terms which they cannot duplicate. Granted. But there is another



This Salesman is Selling Something More Than a Kitchen Fixture; He is Selling the Desire for Better Home Lighting

cold fact to face, namely, that heretofore these same electragnists have not tried to sell such units at *any* price. The proposition lay dormant, though the trade was urged by the manufacturers to tackle it. Opportunity knocked, but the electragnists did not hear.

And here is another point: the same big opportunity is still knocking loudly on the doors of electragnists in more than 5000 towns and cities, large and small, throughout the country. For only a few lighting companies have so far carried on these campaigns. Elsewhere the job is still open to the local electragnists. Will they tackle it, or will they wait until the central station decides to do so?

Power Company Doing Pioneer Work

The success of the kitchen lighting campaign proposition has started the central station industry thinking and working in other directions.

Commercial lighting, for example.

For years and years, the lamp and glass and fixture makers have tried to show the trade that a tremendous market exists for better store lighting. Electragnists have been urged to select a medium priced standard unit and actively *merchandise* it among the retailers of their neighborhood and community.

A few have done so. But broadly speaking, the only commercial lighting we have is that which *existed*. When a store was built or remodeled, the local electragnists scrambled for the job, too frequently trimming their bids to the starvation point.

But that isn't the kind of business the manufacturers have been talking

about. What they have been urging, and what the central stations have been hoping for, is that the trade would go out and *create* business by selling better store lighting equipment to merchants whose present equipment is inadequate. This has not been done except in isolated cases.

So out in Ohio a central station organization takes the bit in its teeth and does the job on its own account. They selected an attractive, medium priced, and efficient unit. They figured out an attractive proposition. And in just ten days they sold over 2600 of these fixtures in seven communities where altogether there are less than 6000 retail merchants of all sorts.

Electragnists Should not Kick

Can the electragnists kick at that? They can and do. But are they justified in kicking? Let's look first and decide afterward.

The units so sold by campaign methods cost the lighting company about \$6.75 complete. They were priced at \$12 installed. The hanging, which this company hires done by local electragnists, costs an average of one dollar per unit (including the electragnist's profit), and \$1.25 per unit was allowed for selling cost. This leaves \$3 gross profit, or about 45 percent.

Nobody contends that 45 percent is adequate on the ordinary small wiring job, but this campaign proposition is not ordinary. It is a sales method which amounts to wholesaling at retail. The salesman goes from store to store, and calls effectively upon half a dozen or more customers in a day. The margin allowed for selling cost makes

it mighty profitable for him. The wireman also goes from job to job, hanging the same fixtures all day long and wasting no time at it, so the margin allowed for that part of the job is fair. The 45 percent gross profit then is not figured on a normal volume of business, it is figured on two or three, or perhaps more nearly on ten times the normal volume.

In the campaign mentioned this 45 percent gross profit amounted to \$14,430, and it was realized in ten days in communities having altogether about 40,000 electric customers and not over 6000 stores.

Difference of Viewpoint on Selling

It is the writer's opinion that the fundamental difference of viewpoint between the central stations who campaign for such business, and the electragnists who complain of their campaigning, is simply a difference in viewpoint on the subject of salesmanship.

The central station's effort is to *create a demand*. The electragnist's effort is to *satisfy a demand*.

When the central station starts a daylight kitchen campaign, or a commercial lighting unit campaign, they *create* the business they get. It isn't business that exists. It isn't business that they compete for. It is business that they *create* by the simple expedient of framing up an attractive proposition and going out and selling it to the public.

When a contractor—pardon me!—when an electragnist bids on a job, he is simply satisfying an existing demand. The man who asks for the bids has to have light for his new store or new fixtures for his remodeled store. He is



Left—The Units Sold to This Jeweller Were Also Sold to the Cigar Store, the Bowling Alley, the Butcher Shop and the Soft Drink Parlor. Right—By Installing Commercial Units in an Automobile Show Place the Central Station Created a Market for the Electragnists to Follow up

"in the market," ready to buy. The business *exists*, it isn't *created*.

The central station, by its campaign, makes the public want better lighting. The electracist, on the other hand, is in business to supply *such* lighting as the public already wants. That's the whole situation, boiled down.

From which we may draw this conclusion:

The central station campaign may really be a mighty good thing for the electracist. These campaigns *create* a bigger demand for better lighting, but they only satisfy a part of that demand. In one instance a campaign sold about 4000 kitchen units; that was only a fraction of the units shipped into that territory within a year. Specifically we have the record of 190 houses which were wired in that territory and in every one of them a daylight kitchen unit was installed by the electracist. The campaign at first seemed to be taking business away from the regular trade but in the end it greatly increased the business the electracists got, because today practically every home that is wired is equipped with a \$7.50 kitchen unit instead of a \$2 stem fixture as was the case a year ago.

Chloroforming the Business

I say the central station campaign may be a good thing for the electracists; on the contrary it may not. The central station may select such cheap equipment that the public is not at-

tracted and thereby good business is chloroformed for a time. Or the electracist, in a short sighted spirit of reprisal, may start a ruckus about the amount of current the campaign unit consumes, thereby throwing a monkey wrench into the gears and causing the whole campaign to fizzle. Or the central station may assume a high and mighty attitude that belittles the electracist and injures his status in the community. These things have happened repeatedly.

But when a central station campaign is run right, with reasonable regard for the rights of all, it accomplishes for him results which under present circumstances the electracist is unable to accomplish alone, and that is—it *creates* business.

So the electracist's problem is not—How shall I combat these campaigns? Rather his problem is—How can I take advantage of these campaigns?

The answer to that problem is comparatively simple and can be stated in three words: *Follow them up*. As soon as a campaign starts find yourself a unit as good and as high priced as the one the central station uses. Make a quick canvass of all your regular customers and live prospects, and solicit their business if possible before the central station reaches them. It is a fact that people generally would rather buy from an electracist they know and respect than they would from the central station.

And when the central station campaign ceases, *keep going*. Follow through. Carry on. For remember, the central station sales effort did the missionary work for you. They went ahead and *created the demand*. You follow along and *supply the demand*. That is the way to look at, and the way to cash in on, central station campaigns.

Canadian Fees Higher

The Canadian Government Radio Service has increased the fees payable for radio licenses. In future, operators of amateur experimental stations will contribute \$2.50 instead of \$1 for their permits. Amateur broadcasting stations will pay \$10 instead of \$5 as formerly, and ship station licenses will cost \$10 instead of \$1. No change has been made in the fees for amateur receiving stations permits, which continue to be issued for the nominal sum of \$1.

STATEMENT OF THE OWNERSHIP, MANAGEMENT, CIRCULATION, ETC., REQUIRED BY THE ACT OF CONGRESS OF AUGUST 24, 1912, OF "THE ELECTRACIST," published monthly at Utica, N. Y., for April 1, 1924:

State of New York,
County of New York, ss.:

Before me, a Notary Public in and for the State and County aforesaid, personally appeared Farquson Johnson, who, having been duly sworn according to law, deposes and says that he is the Editor of "THE ELECTRACIST," and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management (and if a daily paper, the circulation), etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912, embodied in section 443, Postal Laws and Regulations, printed on the reverse of this form, to wit:

1. That the name and addresses of the publisher, editor, managing editor, and business manager are:

Publisher, Association of Electracists—International, 15 W. 37th Street, New York, N. Y.
Editor, Farquson Johnson, 15 W. 37th Street, New York, N. Y.
Managing Editor, none.
Business Manager, Farquson Johnson, 15 W. 37th Street, New York, N. Y.

2. That the owner is:

Association of Electracists—International. Not incorporated. Composed of 2,000 members, of which principal officers are:

James R. Strong, President, 526 W. 34th Street, New York, N. Y.

Laurence W. Davis, Secretary-Treasurer, 15 W. 37th Street, New York, N. Y.

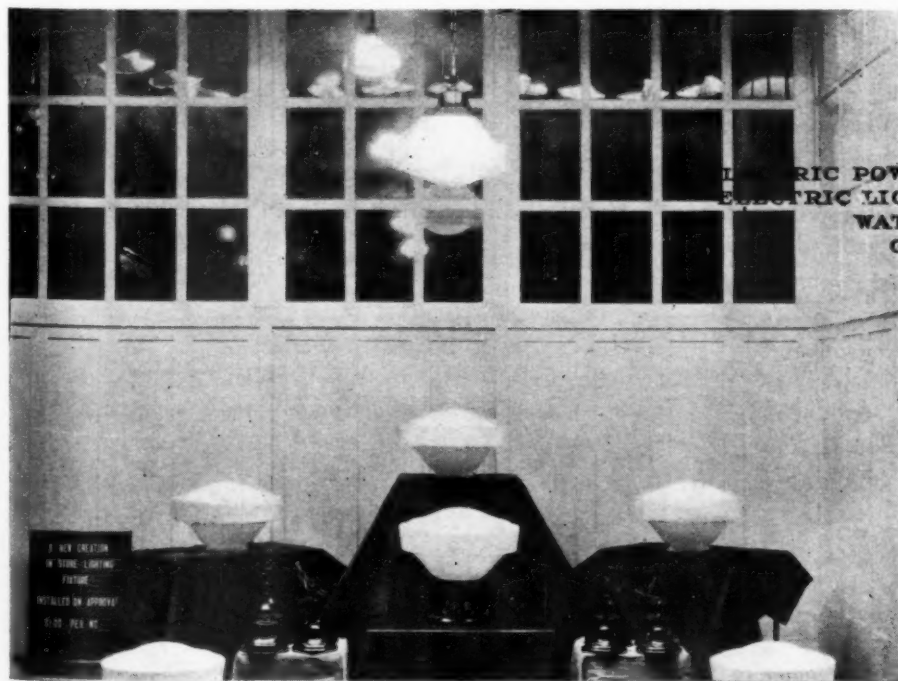
3. That the known bondholders, mortgagees, and other security holders owning or holding 1 per cent. or more of total amount of bonds, mortgages, or other securities are none.

4. That the two paragraphs next above, giving the names of the owners, stockholders, and security holders, if any, contain not only the list of stockholders and security holders as they appear upon the books of the Company, but also, in cases where the stockholder or security holder appears upon the books of the Company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting, is given; also that the said two paragraphs contain statements embracing affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner; and this affiant has no reason to believe that any other person, association, or corporation has any interest direct or indirect in the said stock, bonds, or other securities than as so stated by him.

(Signature of) FARQUSON JOHNSON,
Editor.

Sworn to and subscribed before me this 28th day of March, 1924.

WM. J. MCGIRR,



The Central Station Window Starts Hundreds of People Thinking on the Subject of Better Store Lighting. Only a Few Units Are Actually Sold by Such Displays, But Displays Make it Easier For the Electracist to Sell Later on

Need for Prompt Electric Service

The Public Wants Service and is Willing to Pay For It at a Reasonable Price—How Trade Can Improve Relations

Under the auspices of the Customer Relations Committee of the National Electric Light Association, of which Harold Wright is chairman, F. F. Kellogg of the Duquesne Light Company, Pittsburgh, submits these service suggestions in behalf of central stations which ultimately benefit the electragerist. Mr. Kellogg says:

The objective point of all central station activity is prompt service to the public. The need of prompt electric service at once becomes apparent if we consider that our future will to a great extent be moulded by the reactive affect of our relations with our customers.

One way to improve the service would be to study complaints, and so arrange our service as to eliminate the cause of the complaint. For example a very frequent complaint is from the customer who moves into his new house and is without electric light. Such a condition is aggravated by sickness, accident and fear. The fire hazard assumes serious proportions when matches, candles and lamps are used for illuminating purposes. An important point to remember in connection with that condition is that practically all illuminating fixtures installed today are electric fixtures. In most instances the customer finds that the local grocer, butcher and other storekeepers have anticipated his arrival and are competing for his trade to supply his immediate wants, so that he receives from them what he terms prompt service. Some electric light companies, following that customer's line of reasoning, seem to think they will get his business anyway in time, and apparently do not feel deeply concerned if he is inconvenienced for a few days.

Can such a customer, visibly impressed by his first dealings with the company, be expected to boost your company, or be in a very receptive frame of mind to consider using electric household appliances requiring the use of the service which you supply? How simple it is to avoid this by leaving the service available when final reading is taken for the former occupant. Make it possible for the new customer to make application by telephone. That is a convenient and quick method.

Such practices are being followed very successfully by certain central sta-

tion companies, with the result that the resident public feel that it is receiving a real service from the company.

While this applies more particularly to services which have already been on the company lines, why not apply the same principle of prompt service to the installation requiring line extension? The luxuries of yesterday are the necessities of today, and there is hardly a house built that is not wired for electricity. With the housing situation as it is today, homes are very seldom vacant, so why not, before this house or group of houses is occupied, even when the construction is first started, determine if and under what conditions lines could be extended. If the amount of business in sight reasonably warrants it, let us extend these lines and connect the service so that the houses may be served when they are ready for occupancy. This same principle should also apply to the house along lines which is being wired for electricity. It is such little things that go a long way toward prompt service, returning large dividends in satisfied customers, who not only become boosters for your company, but have a real confidence in your company and whatever you have to offer.

The principle of prompt service should begin to apply with the first indication that a prospective customer will need electricity, and should continue throughout the entire relation with that particular customer.

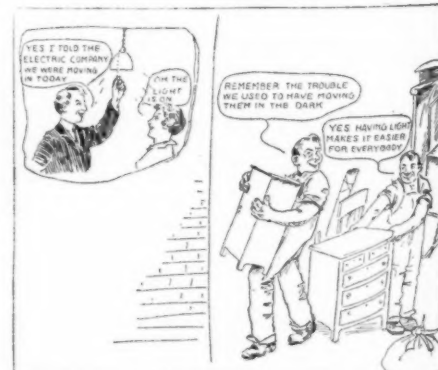
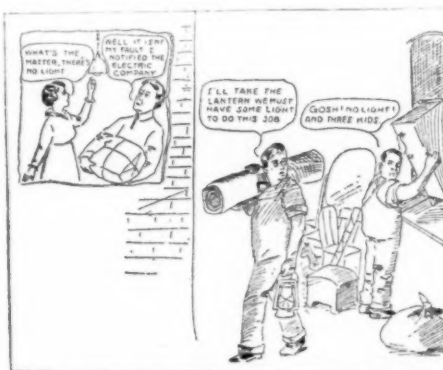
Recent statistics compiled by one of the larger member companies indicated that the number of electrical household appliances is far below the point of saturation and the investment per

home in such appliances is far below what it should be. The rapid growth of the industry during the past few years has required the expenditure of an enormous amount of money. In contemplating the financing which must be done in the future to keep pace with our growth, surely we will approach these problems with a feeling of greater confidence if we know that our requirements will come from a public who are not only satisfied with the service we are rendering them, but by reason of our business enterprise and activity in anticipating the public needs, have a feeling of utmost confidence in the securities which we will have to offer.

After all it is service that the public wants and for which it is willing to pay a reasonable price. There is no doubt that with a better understanding of our problems and appreciation of our desire to render a bigger and better service the relations between the public and the central station will become better and broader in every way.

Pushing Summer Sales

The radio section of the Associated Manufacturers of Electrical Supplies stands one hundred percent behind the idea of making the summer of 1924 a real radio summer and is doing all it can to that end. As a member of the section, C. Brandes, Inc., manufacturers of headsets, has inaugurated a campaign to put summer radio on the same plane that it enjoys during the winter months. This campaign includes full pages in a number of the great popular magazines during May, June, July and August in addition to space in trade magazines, booklets, sales helps and broadsides. In answer to a questionnaire it has been found that the trade is ready to back this campaign.



A New Comer to Town Will be a 100 Percent Better Booster for Things Electric if He Doesn't Have to Stumble Around to Get the House in Order the First Night After Moving in by Finding That the Juice for the Lights Has Been Left on by the Former Occupant

Nobody to Blame But the Electrical Contractor

By CHARLES L. EIDLITZ

Chairman of Governors of New York Electrical Board of Trade
Says If You Sell Something Stand Back of It, Don't Duck!

Contractors complain that general contractors, owners, and architects are gradually buying direct from the manufacturers, where formerly they bought through the electrical contractor. This is a fact, and the contractor has no one to blame but himself.

In my time, if the engines, generators, switchboards or fixtures, etc., were in my contract, and if anything went wrong with them or there was a failure to deliver on time, I took all the responsibility so far as owner or architect was concerned. In other words, I took any blame or censure for such conditions. Today the contractor immediately unloads on his sub. He meets a complaint of the architect, with something like the following: "Oh, that's the fault of the Jones Company from whom I am buying the machines. I cannot get them to keep up to schedule, etc."

The result of this statement is, that the general contractor, owner, or architect, in an attempt to help out the situation, hunts up the Jones Company, frequently at the contractor's own suggestion, to see what can be done to expedite matters. This brings him in close contact with the manufacturer, and he frequently finds that the manufacturer is blameless and that the fault lies with the contractor who either failed to make proper arrangements, delayed approval of drawings, or failed to furnish information necessary, etc. The manufacturer naturally makes a special effort to satisfy the architect and this

results in establishing a rather friendly relationship between them, which makes Mr. Architect wonder just why he should not deal directly with the manufacturer from the start. And so on the next job he prepares a separate specification and takes his bid directly from him, and the contractor has no part in the transaction.

In other words, you cannot have the pie and eat it.

If you want to be a general electrical contractor from whom the entire equipment is to be purchased, you must stand back of your sub and make a point of keeping him in the background and not permitting him to come in contact with your principal.

Most electrical contractors today want to take credit when everything works out as per schedule, but they duck and try to unload on their sub if anything goes wrong. This same criticism applies to the general contractor, but in that case it pleases the electrical man because it brings him in closer touch with the owner or architect. The manufacturer is no different than are you yourself. If he is to get no credit for a success, but is to be thrown to the owner's mercy for a failure, he would rather deal directly with him from the beginning, and get credit when it's going the rounds.

No one is to blame for the efforts being made by architects, engineers and owners to separate specifications on equipment except the *Electrical Contractor*.

Eliminating Friction in the Electrical Business

By CLYDE L. CHAMBLIN

Speaking at Eastern Division Convention on Coöperation in California, Executive Committeeman of Pacific Division Urges Electragists to Work in Harmony

In discussing the subject assigned me, I have assumed that you would be more particularly interested in the subject as it pertains to our own branch of the electrical industry. Therefore, I have divided the subject into the following divisions: Power Company, Jobbers, Manufacturers, State Association and Local Association.

The power companies in our section of the country do no retailing, nor do they do wiring. During the past year they have conducted both range and illumination campaigns in coöperation with the contractors and dealers. Each branch of the industry contributed to a fund for the salary and expense of five illumination salesmen. A canvas of thousands of poorly lighted stores was made, and only those contractors who had contributed to the fund were called in for estimating or installing better lighting as the idea was sold. We will continue to feel the beneficial effects of this campaign for all time to come.

The power companies bring their feeds to the building lines only, and do not carry any wires within the building. They have representatives at practically all of our state and local meetings, and these men are the points of personal contact that keep our relationship on a friendly basis. In turn, the contractors are salesmen for the power companies, and are ever ready to explain the rates and other mysteries that the public is ready to criticize. They are active in the formation of local leagues and are honestly endeavoring to build up good will.

Wholesale Only

The jobbers are next in our discussion. The jobbers in our territory have "Wholesale Only" on the door and do no retailing. Also, they coöperate with the contractors and dealers in directing the industrial buyers to their various dealers. The contractor-dealer is protected approximately 10 percent over industrial buyers, which makes it possible for the dealer to handle this class of business along with his other departments. The result has been that several of us have a very nice semi-wholesale business, as it might be

termed, and this contact naturally results in construction work from time to time.

As a whole, the jobbers are very strict on extending credit, and much emphasis is laid on cash discounting. The non-association jobbers of San Francisco have recently organized and are following out the principal policies of the older organization.

By this coöperation the irresponsible, fly-by-night contractor is finding it



Clyde L. Chamblin

hard sledding, and a better feeling is created between the supply houses and contractors throughout the territory.

The manufacturers for the most part adhere strictly to the Goodwin plan, and except in the case of special apparatus, sell through the jobbers only.

Should Use Electragist Emblem

The State Association has found it almost necessary to separate the work in the north and the south. The southern section is carrying on the usual association activities, and are promoting an emblem along the same lines as the northern section. The only sad part of the emblem idea is that each section is promoting a separate emblem when both should be using the Electragist emblem.

The California Electrical Coöperative Campaign has had so many vol-

umes written about it that I will not attempt to review its work. However, the Campaign has put California in the front ranks of coöperative electrical development.

Now we come to the very heart of the situation, the local association. We have good local associations in the principal cities, for without good healthy locals, state or national work will never amount to anything. Speaking particularly of San Francisco, we have a committee now investigating the possibilities of a Central Estimating Bureau, or Quantity Survey Bureau. This system is working quite successfully in other lines.

We have also recently adopted a group insurance plan for our employees. Under this plan any employe from office to wireman, who remains in our employ for thirty days will be protected by a thousand dollar life policy, the premium to be paid by the employer.

This means that if a journeyman is laid off in one shop he has two weeks' grace in order to get work in one of the other shops covered by this insurance. This also means that the better class of mechanics will seek to stay in the shops covering him under this plan of insurance. All of this is in addition to the Compensation Insurance. We believe this will make for a closer understanding with our men, and they will feel that the employer is not in the game for himself only.

Live and Help Live

In summing up our work I would say that we believe our only hope of bringing up our branch of the industry to its proper place is by the slow process of education, and a close tiein with the other branches of the industry. Our first responsibility is with our own organizations, and next our relation to our competitor. After we have made a close and detailed study of our own business, have a proper accounting system, thereby *knowing* what it costs each one of us to do business, have a harmonious team working organization, our next study should be our relationship to our competitor. We do not need bylaws and constitutions to work by if we would only adopt the policy

that "Confidence begets confidence". Think what we could accomplish if we stood together for the policy that Sam Chase gave us in "Live and Help Live."

Until our business gets over the insane idea of getting volume regardless of ethical business methods, regardless of costs, with only the idea of being able to swell up and boast of the big business we are doing, the sooner we will begin to stop the supporting of electricians and jobbers and manufacturers at salaries that real business men would consider a joke.

In a recent survey conducted by the secretary of the Oakland Association, he found that while some contractors were not paying themselves any definite salary, others were not paying themselves any more than a first class journeyman would get. A low salary means a low overhead, and with a low overhead added to the cost, a lower price may be given, which means that the poor deluded contractor is losing in both places, first in an inadequate salary, and next in reasonable percentage of profit.

Unselfishness is Necessary

We have been shouting coöperation from the housetops until it has become a byword; we have tried agreements with labor, air tight associations and all sorts of fake bolstering up of our business, with the idea of forcing money into our pockets by other than the use of our own individual horse sense and ability.

If we could get the really fine, intelligent leaders of the electrical contractors and dealers of this country to adopt the policy of unselfishness and confidence, and locally, throughout the state, and nationally, they would stand together regardless of what the fly-by-night, irresponsible contractors might do, there would be less involuntary retirements from the field, less creditors' meetings, and the name Electragist would become synonymous of a business outstanding in its endeavor to bring success to its members through mutual helpfulness and proper service to the public.

There is a reasonable volume that each one of us is set up to do, and when we try to go beyond that limit we are injuring both our competitor and ourselves, for we are lessening our percentage of profit as a usual thing, and we are preventing our competitor from getting the volume that he is entitled to. Thus we pull down through greed,

rather than study to give such efficient service to the trade we already enjoy, that it becomes an asset that is like a bank account. Then it is when slack business times come, the firm who has built up good will has something to fall back on, while the seeker after volume at any cost passes out of the picture.

Estimating data is necessary, codes are necessary, bylaws, constitutions, and information pertaining to the various angles and problems of our business are necessary for successful operation, but what avails such a structure if its foundation is greed, and its only use to build volume rather than profits? Why should not we of the Electragists International who have so much in common, be the closest of friends and play more together, as well as work together?

Close friendship is the oil that will absolutely eliminate friction in business, and real coöperation, whether in California or New York, Canada or Florida, will never be a reality until it is voluntary from within, rather than legislated from without.

Your Local Secretary

According to a writer in the *Warm Air Heating and Sheet Metal Journal*, he is a mighty important factor in the organization, whether it is a local or a state association. More and more he is looked upon as the driving wheel. He can make or break his association. Sooner or later he naturally by his own action or inaction is drawn into one of three classes, namely:

- Aggressive.
- Passive.
- Dormant.

The first quality needs no explana-

tion. His work is kept up to date, he is constantly on the outlook for new members, new methods, anything that will help and interest. The aggressive secretary does not have to be hammered at, coaxed, begged, cajoled, etc., to the end of an undesirable catalog for membership reports, collection of members' per capita tax, remittances, etc.

We once heard a secretary of a small association say that his treasurer was an up to date business man and discounted all his bills, but he (the secretary) generally had to go around and ask for a check for his salary, otherwise it would be weeks overdue.

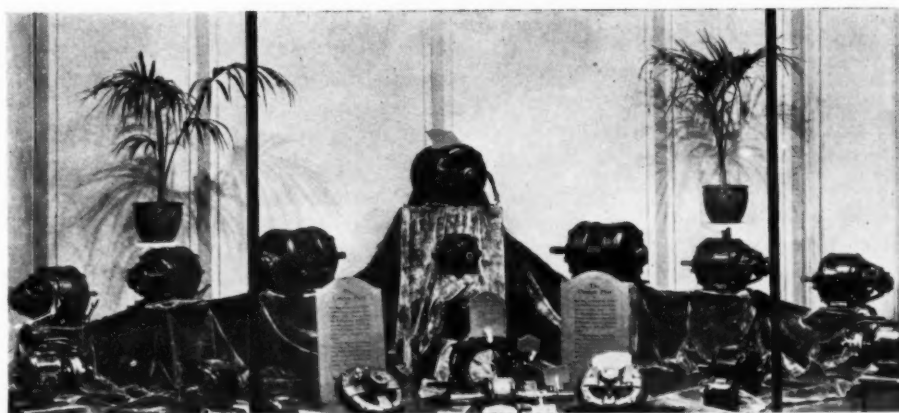
Why a secretary will claim all the virtues of the progressive business man and neglect his secretarial duties to the wellnigh demoralization of his association is something that remains unsolved.

The second quality—passive—is an influence that prevents a secretary from doing only just what comes to him. He never thinks of anything out of the unusual track and generally has to be reminded that he is still secretary.

Of the third quality—dormant—little need be said. It practically means, gone to sleep on the job. Can you imagine a live association with the secretary asleep at the post?

Can you imagine a local secretary who will pay no attention to his correspondence, and who makes no effort to keep in touch with his members, or keep them informed about association matters?

Well, it is possible for these things to happen. They do not happen with the aggressive kind of a secretary. Pride, if nothing else, ought to be a sufficient incentive for every secretary elevated to that important office to put himself in the aggressive class.



Do Manufacturers Practice What They Preach in Regard to Window Display and Store Arrangement? The Westinghouse Company Endeavors to and Exhibits This Picture of a Trim in One of Its Buildings on the Pacific Coast as Proof

Retailing and Installing Electrical Products

In many quarters of the electrical industry the electrical contractor is thought of as a man whose business does not include retailing, when as an actual fact a large majority of the men in the trade thus termed do carry on a well defined merchandising business. The misnomer came about by reason of the logical inception of contracting—the wiring of buildings for light—before the invention of appliances, and when appliances did come into being the one man in the industry to sell them to the public was the contractor.

So now a contractor oftentimes—in most cases—is not only a contractor but a contractor-dealer; and not uncommonly does his merchandising business compare favorably, in volume if not in profits, with his contracting business. It is therefore wrong to call a contractor-dealer a contractor and such a misrepresentation frequently is an injustice.

In this connection the Association of Electragists made a survey of its membership some time ago and found that more than 70% of the electrical contractors have retail stores; and less than

3% do no contracting. This means that while 97% are contractors, about three fourths of that number are also retailers. Further, 55% of the total display lighting fixtures; and 28% operate motor repair shops. Generally speaking then 100% of the Association's members sell or install everything that is manufactured in the way of electrical devices, appliances and appurtenances.

Would this not seem to indicate that the contractor-dealer should be known as a merchandiser as well as a contractor? It is an injustice to call the contractor-dealer a contractor, an injustice to the dealer—to the contractor himself—and to the trade in general.

The industry cannot afford to have this misrepresentation continue. Call a contractor a contractor. But do not fail to recognize the merchandising end of the business fairly. And remember that a great majority of contractors in the present day meaning of that term are really contractor-dealers. As members of the Association of Electragists, they all are *electragists*—which is another matter, and quite as important.

How to Demonstrate and Service Appliances

By F. J. SAYLOR

Merchandising Expert of Eureka Vacuum Cleaner Co., Gave Views at Annual Electragist Gathering and Floor Discussions That Followed are Appended

I might say in the beginning that the gentleman who picked this subject knew something about operating an electrical appliance store, as the two operations are so important in their relation to each other, that you cannot neglect one without affecting the other.

Of course our primary interest is in the demonstration of the appliances, because the article must be sold before service can begin. In our stores we place the service manager under the outside salesmanager, as the sales and salesmen are most affected by the kind of service rendered by the store.

Art of Demonstrating

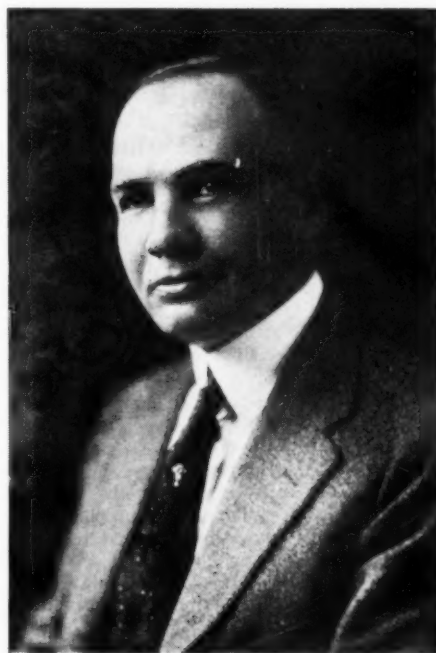
As the first impression of an article is often seventy five percent of the sale, it is important that this first showing be as favorable as possible. Most manufacturers now place their merchandise in attractive cartons, and if at all possible the demonstrator should unpack the article in the home before the eyes of the prospect; he should even go so far as to conduct it with a certain amount of ceremony and explanation as to the care that is taken that their customers receive the product in the original container and expressly packed for them. Whenever possible the article should be delivered by the salesman, so that the customer cannot form a negative impression in trying to operate an unfamiliar article, especially a mechanical appliance that a woman will eventually use.

You must demonstrate to sell. When you appreciate that for such appliances as vacuum cleaners, washing machines and ironing machines, particularly on direct selling methods, you must demonstrate before you can sell, then you realize the importance of a good demonstration. I might say that in most cases, if the article is properly shown, it in itself will compel the customer to purchase without much selling ability on the part of the salesman.

After the Sale—Service

On that word service many crimes have been committed both by dealer and customer. We in the appliance business have inherited a custom started undoubtedly by the central stations, who first

sold appliances to their consumers. If the customer had been educated along the lines of the automobile purchaser for instance the service question would not be as serious a one as it is today. Your customer has been trained to expect free service for the life of the article regardless of the care they may give same, while in other lines of business



F. J. Saylor

selling mechanical goods the people expect to pay for repairs and for every service they demand.

The guarantee from the manufacturer is defective material and workmanship, but the real cost of that service falls on the dealer, as he must spend his money for the most expensive part of this service cost, and that is in the home; while the manufacturer furnishes parts that to him cost as little as a part, and are made as regular production material. So the guarantee, although it is signed by the manufacturer, is endorsed by the dealer, and he is the one to whom they look for service; often not knowing or not interested in who manufactures the article, but buying it on the reputation of the dealer.

Ruining Manufacturer's Reputation

A manufacturer's reputation can be ruined by poor service rendered by dealers, and their large national advertise-

ment appropriation will be worthless; as when that article is sold and the service neglected, it soon effects local and eventually national sales.

There have been appliances put on the market, and put over by large national advertising copy that has created an enormous demand for them, but they finally failed for two reasons: First, the article which was sold by the pretty picture was not mechanically correct, causing enormous service for the dealer. Second, the dealer not having a proper service department or being unable to get repair parts, finally ended in the maker closing his factory and the dealer in that article losing his reputation as one selling reputable merchandise.

Your service department should not necessarily make a profit for you, but it should break even, after giving the customer the free service, or you might say the minor adjustments that a mechanical device might need in a year's use.

We have found that by making a reasonable charge for repairs even on machines within the guarantee period, if it is plain that the machine has been misused, it will cut your service calls down one-third, as the customers then realize that they have some obligations in the care and use of the article they purchase; and they will be more careful if they have to pay for their carelessness. This is extremely important and each case of this kind must be tactfully handled by a competent member of your organization who is in charge.

Outside of the Store Service

You no doubt will be interested in the scale of charges we make in our service departments, and I will outline these as follows, for the work done in the store repair shop: The minimum charge on all minor repairs to cords and small appliances is seventy five cents. Second, on any appliance that takes one hour or more to repair, the labor is charged at the rate of one dollar and fifty cents per hour, plus the cost of any material used. A flat charge of three dollars is made for installing heat elements in irons; this includes new elements and terminal pins, also minor adjustments.

Such service as is rendered in the

home on cleaners, washers, ironers, ranges, etc. First, a minimum charge of one dollar is made for small repairs, such as broken cords and minor adjustments. Second, where outside repairs take one hour or more to complete, the time is charged from the time that the man leaves the shop until he returns, and the rate is one dollar and a half per hour plus the material used. The service man upon the completion of the repairs tries to collect the service charge immediately from the customer, to reduce bookkeeping expense, as we have found it unprofitable to collect small delinquent repair charges, and once your customers realize that repair charges are C. O. D. they are prepared to pay for this service when the repair is made.

The method we use in finding our cost of operating this service department, is to charge all direct expense, such as automobile expense, labor, insurance on cars, depreciation and all material used in making repairs. We credit that department with parts sales made by the store, such as cleaner bags and brushes, extension cords, etc., and of course direct charges made by that department to the customers.

We do not consider that the repair department has an inventory at any time, so that the figures I am about to give you do not take into consideration quite a respectable stock of parts, neither do we credit the repair department for materials used in the free service rendered the customers.

We will take one store as an example

of the cost of and return, as applied to the operation of the service department:

The total repair charges or sales for one year were \$11,768.82. Expenses were \$11,597.12, divided as follows: Auto expense, \$1,282.95, labor, \$5,730.00, and material, \$4,584.17; or a profit of \$171.70. Of course this profit does not take into consideration, as I said before, of the inventory of material on hand, nor a legitimate charge that could be made to the sales department for the free service rendered.

I might say in closing, that if an appliance is properly demonstrated in the home and a short talk given on the care of the article, immediately your service will be lessened and sales increased.

The most important, at least from the writer's viewpoint, is for the dealer to sell only such appliances that are of a standard manufacture, and not the kind that require continuous service and expense to maintain. From my experience such appliances are made and sold today.

CHAIRMAN SAYLOR: Gentlemen, are there any questions, or discussions of this matter?

PRESIDENT STRONG: Mr. Chairman, I would like to ask you a question. I have heard wonder expressed many times as to why electrical apparatus requires such a large amount of demonstration. If you buy a lawn mower, they don't send anybody out with it to show you how to cut your lawn. The lawn mower is rather complicated in a way and yet you may get a pretty good sized one for eight or nine dollars. How much electrical appliance equipment can you get for that sum?

The question that occurs to my mind is

whether the present system of demonstration which goes with all electrical apparatus isn't extremely exaggerated, and to some extent unnecessary, and a source of cost which makes this overhead of appliance distribution extremely high?

CHAIRMAN SAYLOR: The only answer I have to that is the fact that there is no such fear on the part of a woman using a mechanical appliance, as there is where she is using an electrical appliance. A woman has a certain fear in using an appliance of that kind, and she always wants someone to come out and show her the operation of that particular machine where she is going to use it.

Take the lawn mower, which Mr. Strong has referred to, as an example. That is usually used by the husband—or should be—and there isn't any fear accompanying the use of that machine.

I will admit that the extreme costs of demonstrating an electrical appliance in the home is what has created the present list price on such machines and appliances.

At one time the conditions were such in the appliance field that practically all of them were sold through newspaper advertising. Today if we depended upon the sales received from newspaper advertising we would have our volume of sales cut to practically one-tenth; and in the second place the advertising costs would run from twelve to fifteen dollars. So that we have to use this expensive method of selling, which includes demonstration in the home, in order to get the volume of business which we certainly should handle, with the number of electrical consumers that we have in this country.

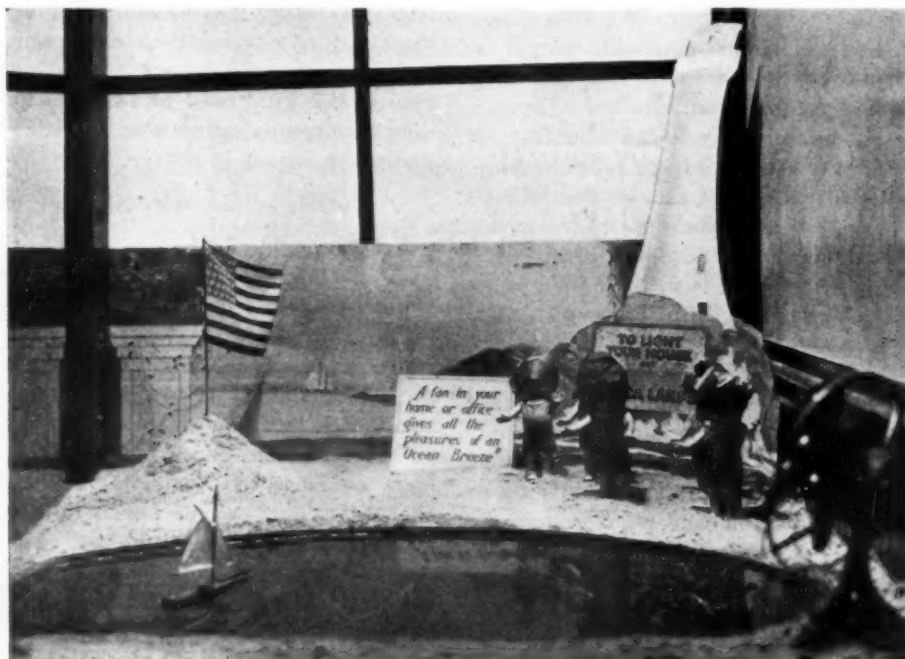
PRESIDENT STRONG: Mr. Chairman, I would like to ask Miss Carroll to come forward and say something on this subject.

MISS ALICE CARROLL, New York City: Mr. Chairman, I thought I would get into this when you began berating the women, and the thought occurred to me that it might be well for some of these appliance dealers to wait until the woman wanted a vacuum cleaner before they tried to go out and sell it to her.

I did not expect to talk on this or any other subject at this time—although I usually like to talk—and I have made no preparation but I am going to cite a case that actually came under my own observation last summer, and I am going to tell you just exactly what happened, and then you merchandisers can tell me what ought to have been done.

A certain company got after a woman I know to buy a washing machine, and finally she agreed to buy it, and it was delivered in her kitchen. There was an A. C. motor on it, instead of a D. C., and as she had direct current, she couldn't use it, and it stood in her kitchen for three days. Finally they sent a man to change the motor, and the day after the motor was changed, she attempted to wash, and the machine hadn't been in operation more than three minutes when it began smoking terribly. I said to her, "Oh, I think it is just the oil burning off," but it commenced to look so dangerous that she turned it off and waited three or four more days, and then a mechanic came out, and when she asked him what was the matter with it, he said the motor was timed for six and six, instead of two and two—whatever that meant.

Now that is a truthful occurrence, and it meant that this woman had to wait for ten days before she got her washing done, and that thing stood there in the middle of her kitchen during that time, not connected. That is simply one case, and I could tell you about dozens of them, because I do happen to get the women's point of view on these appliances.



You Can Fairly Imagine by This Display That You Are Sitting on the Sandy Beach Enjoying the Cooling Breezes Coming Over the Sparkling Water—Window of the Wisconsin Power, Light & Heat Company

I don't know just how you are going to correct it, but it does seem to me that there should be a good working installation at the start. I am just wondering where you would place the blame in the case which I have related. I don't think that the position taken is tenable that you have to demonstrate more, just because it is a woman.

CHAIRMAN SAYLOR: This simply goes back to the question I have been discussing with reference to service.

I don't believe this condition that Miss Carroll spoke of, occurred in any of the cities where we operate stores. But that sort of condition arises out of your service department not being closely connected up with your sales department.

Now take that condition, that the washing machine was sold with an improper motor on it, and for a wrong current, using the system as I have outlined it in this paper: The salesman would have been there to open up the crate on that washing machine. He would have been there when the machine was delivered to demonstrate it. He would have tried it out. He is not an electragist—he is a salesman, but he would see that something was wrong and he would immediately report back to the sales manager, for whom he worked, and the sales manager, being in charge of the service department, would have sent someone immediately to fix the washing machine.

I don't say that this method is infallible, but you can readily see how much better the service will be that the customer will receive under this arrangement than it would be if the service department were a separate department in the store, with probably the manager of the store as the one to whom to report, rather than the head of the sales department, where the interest is greater in the commission both for the salesman and the sales manager.

And I want to state that I would not for a moment reflect on women's intelligence, because I am married. If all the ladies to whom we sell electrical apparatus were like Miss Carroll we would have very little trouble, because she has no fear of electrical equipment.

But when you take into consideration that the good salesman who goes out to make a demonstration in the home, suggests to his customer that she have her neighbors come in to see the demonstration, who might possibly be interested in the same appliance, and he is getting prospects from the neighbor women, and in the end the cost of the particular demonstration is lowered, because of the volume of business that the salesman can get by making the proper demonstration. In the end I believe you will find that if the machine is properly demonstrated, your service cost will be cut two-thirds, because the man of the house will know how to oil the machine and take care of it.

MR. WATTS: Mr. Chairman, I don't think there is any question but what the sale of appliances is costing too much money, and the servicing of them is no small factor in that.

We have to get these costs of both selling and of servicing reduced to a minimum. You must not forget that the great majority of the people of this country have very small incomes, and buying a washing machine for a hundred and fifty or a hundred and seventy-five dollars, cuts quite a figure with them.

I believe the larger part of the servicing is unnecessary.

Now you talk about demonstrating a machine. The only purpose of the demonstration is to prove that the machine will do what you said it would do.

I don't believe that the sale of the machine

should be made fundamentally on the demonstration. I believe that the sale should be made on what that machine will accomplish in service in the home, and then if you wish to demonstrate how the machine is to be used to take the greatest advantage of it, that is a different story. The idea of washing clothes with an electrical washing machine is the idea which should be sold.

Now when this second story worker sells the machine and gives a demonstration that will do it, out he goes. He probably has his first payment, and he is through. This applies to the great majority of the sales of washing machines.

I'll tell you the machine is not sold after the woman buys it if the man doesn't know anything about teaching her how to use it. He may know the construction of the washing machine or the vacuum cleaner, all of its electrical characteristics, and all the things that it will do, but if he doesn't know the problem of the woman in the house the rest is of no use.

Now I have something to suggest here, and I wish you would just throw that gavel in the waste basket, so that you won't try to use it on me when I make this suggestion.

What would you think of this idea? I believe that a large percentage of this servicing is unnecessary, if the women only understood about the operation of the machine. It takes a woman to show a woman, because a man doesn't know anything about the household problems.

Why wouldn't it be a good idea for the central station and the electragist to get a little closer in their relations, and whenever a washing machine, or appliance of any kind, is sold into a home, the dealer will notify the commercial department of the light and power company, or if there be a League, let him notify the field man and if it is a League, they probably will have in their employ a woman who knows appliances and their use, and understands housekeeping problems and that woman would be sent to that home to show the woman of the house how to use and utilize the appliance which she has bought, to the greatest advantage.

When the manufacturer or the dealer sells a washing machine he wants to see the transaction closed as quickly as possible,

and get his money. When he has sold a washing machine that goes into a home, he has immediately put a revenue producer on the lines of the light and power company, and they should have the greatest interest in seeing that the greatest possible use is made of that machine. Why shouldn't they be interested in sending a woman into the home to see to that very thing?

MR. LEVY, New York City: Mr. Chairman, the New York Edison Company does just exactly that thing. We had a typical case last week. A woman up on 128th Street bought a cleaner, and we sent out a woman demonstrator, and she was delighted with the results of that demonstration.

The New York Edison Company goes further. They carry on an active campaign in the high schools and colleges by sending a demonstrator with the various appliances into the class rooms, and they are allowed a certain time—a half an hour, or an hour—in which to demonstrate those appliances. That propaganda promotes the sales of appliances, and it has been very effective.

CHAIRMAN SAYLOR: Mr. Watts spoke of an ideal condition. I don't know just how much experience Mr. Watts has had in selling appliances, whether through central stations, or through retail stores. But you must take into consideration the human element in the man, or the woman, who are making their livelihood by selling appliances.

Now, happening to be closely connected with two central stations—and fighting the rest of them—I get two angles of that situation. If the central stations sold appliances themselves, this idea of course would be impossible to work out.

The ladies who would normally be employed to send out to make these demonstrations, like all other humans, are subject to inducements—the inducement for turning over prospects that they receive, while demonstrating a machine in a home, to an opposing contractor, I might say as an instance. So that in a short time I believe that any idea of that kind would be wrecked on the rocks of competition.

There can be a lot of theory and a lot of plans laid out, but you have to take into consideration the man who is making his living selling appliances is going to use every



Don't Just Tell Them How far Superior an Electric Range is—Show Them! Have One Connected in Your Store and a Cook Handy to Back up Your Arguments with Appetizing Proof. This Scene From "Show 'Em How" Gives You the Idea in Concrete Form

legitimate means to get a sale away from his competitor. That is possible, no matter whether you are selling a house wiring job, or an electric washing machine.

Another thing: You take the contractor's standpoint—he is operating a shop for the making of minor repairs—if the central stations would do that, as I believe they do in the city of Detroit, that is a source of income that the contractor will lose.

I was in the contracting business myself at one time, and I know that our greatest source of revenue was from these small jobs which we did every day in the week, and if we lost that business it would have probably eliminated four or five men from our organization, whose returns came from that sort of work.

MR. WATTS: If a central station is selling one washing machine, and a contractor another, that eliminates the possibility of the contractor getting the repair work.

I think the utility companies are anxious to see every dealer selling as many machines as they possibly can, and get them on their lines. I do not think it necessarily follows that the repair business is going to be taken away from the contractor, just because the central station is selling machines. But I do think the central station could relieve the contractor or the dealer of very much of this service for which he cannot charge. If a woman attaches her machine to an electric socket, and the machine doesn't run, and she sends a hurry up call to the dealer who sold it to her, and he comes out and finds that the key on the socket hasn't been turned so that the current could flow into the machine, if he attempted to charge for that service how would he come out?

I don't mean that the repair business should be taken away from the contractor. I believe that some sort of a combination, or method of cooperation can be worked out. If there is no League to do it, the utility company will do it.

Then some day when the utility companies and the dealers come to understand each other, and the dealers have developed this business to a point where the light and power companies will not have to sell these machines, then they will come into their own; but until they reach that point the light and power companies will not cease selling the machines.

MR. KALISCHER: Mr. Saylor, did I understand you to say that the income was eleven thousand dollars plus for repairs, and that your cost was eleven thousand dollars plus?

CHAIRMAN SAYLOR: Yes.

MR. KALISCHER: I don't see how the contractor would be very much interested, under those circumstances.

CHAIRMAN SAYLOR: When I wrote this paper—as I believe I mentioned in the paper—I didn't believe that the repair department should make money, and our charges are based from that angle.

As Mr. Watts mentioned, the cost that the contractor has in servicing appliances that he sells, if he had other repairs, or repairs that are made after the guarantee of the machine has expired, they should be sufficient to offset the adjustment, or free service as we call it, on the initial year's use of the machine. So that you would have to have those additional repairs without taking into consideration that if you didn't repair the articles that you are selling, that you would not sell any more of the articles. So that in fixing the prices in our service department, all of that is taken into consideration, and as I said we do not charge the sales department for the legitimate charge that should be made to them by the service department, for the adjustment that they must make on the initial year's use of that particular article.

A MEMBER: Mr. Chairman, I would like to ask how much, in dollars and cents, does that service represent? In other words, how much in money does that eleven thousand dollars apply to, in order to get the proportion of the cost of service to the amount of service?

CHAIRMAN SAYLOR: Well I would say in this particular case it was on the volume of business of approximately three hundred thousand dollars. That was the total sales business of that particular store. Now understand we are servicing appliances that had been sold five or ten years previous to that.

A MEMBER: It is about four percent, isn't it?

CHAIRMAN SAYLOR: That isn't so bad.

MR. R. W. KECK, Allentown, Pa.: Mr. Chairman, I cannot conceive the idea of charging servicing only as service.

I don't want to sell an electric appliance, as a contractor-dealer, unless there are some chances of servicing that article—even if it is only going out to that house and turning on the current, because that will give me an entre so that I can get in touch with that customer the second time after the first sale is made. The electrical dealer has the wrong conception of servicing electrical appliances. I believe that after the first electrical appliance is sold into the home, the oftener you get in contact with that customer—if it is only for the purpose of servicing the appliance—the better and stronger goodwill you will establish with that customer, and it is the cheapest advertising that the contractor can get to increase his appliance business.

Now I happened to be one of the victims of a certain washer campaign, and I made money, and I never took back a machine from a dissatisfied customer. That is saying something, I know, but it is an absolute fact.

I sell Hoover cleaners, and I demonstrate them personally, whenever I can. I tell the lady, while I am demonstrating it, that there are two adjustments on the brush of the Hoover cleaner, when the bristles wear out, but I say to her, I am not going to show you how to do it, because just as soon as you discover that the Hoover cleaner is not as efficient as it was when you bought it, I want you to call me on the telephone, and I will come right out, or send a man out to adjust it, because I want to get that personal contact with you again."

I think that the oftener the dealer gets in personal contact with his customers, either himself, or through his employees, the greater will be his profits and the larger his volume of business.

MR. BARROWS: In Pittsburgh the central station sells appliances, and the big idea of the central station is to service the machines and appliances that they put out, and when we stop to think that this big idea is passed down to anywhere from one to forty departments, and each fellow in each department is looking after the business and the little extra money that can be obtained, and his company says, "We must not lose the personal contract with our customers," it is impossible for another man to service those appliances, or even get a look in on that business, if it is possible to keep us away.

MR. N. L. WALKER, Raleigh: Mr. Chairman, I don't think we should overlook the point that was brought out by Miss Carroll just now.

I don't think the washing machine that she referred to could have been sold by an electrager. We ship a large amount of stuff out of our town, but we wouldn't think of shipping a motor for instance without finding out the characteristics of the current in the town to which that motor is going. We wouldn't sell it in the first place without finding out about that. If that man who buys it, can't tell us, while he is in our place, we won't sell it to him until he has gone home and obtained from his central station man, if he can't get it otherwise, information as to the character of the current.

You have got to feel at all times that you are in the position of a doctor who has to give a prescription. You can't sell a man a motor just for the sake of selling it. You have got to think of the service that it is to render.

But I don't believe in this matter of servicing a machine, or demonstrating it, unless you are equipped for it; unless you have got at least a department for it.

I can't see why the electrical man generally, just as soon as he is in the electrical business, should feel that he is in a position to sell



Behold! Another Display Expert Enters Our Midst. Carl W. Maedje is His Name and He is Winning Fame Under the Banner of the National Lamp Works at Cleveland. We Ask You if this Idea Isn't a Winner?

vacuum cleaners and washing machines, unless he is in a position to service them.

Our customers know nothing about electrical terms, and unless we think for our customers in those terms, we cannot build up our business. When your customers find that you do think for them, then you will get business.

Mr. WATTS: Mr. Chairman, I want to say to the ambassador from Pittsburgh, that the soundness of the theory is not affected by the poor ethics.

Mr. COLLINS: Mr. Chairman, I would like to get away from the washing machine proposition, because it is a dirty business, and I don't want to spend all afternoon on it.

I think we are all wrong, in our International Association and local associations. We have meetings and we talk wiring and Code and motors, and we stop. At the next session it is percolators and toasters and irons, and no matter which way you start the merchandising game, you always wind up with the washing machine, and spend three quarters of the time on that.

I say we are losing sight of one of the biggest opportunities that we have ever had. We are going at it wrong, when we talk about merchandising separate from contracting.

Now just think how we could mix the two. Just figure over in your mind how the average proposal is submitted on a house wiring job. It runs about this way: Dear Sirs: We propose to furnish the labor and material on your building for so much money, including so many ceiling outlets, so many brackets, so many switches," and so on.

The owner is all lined up and he says, "Well, I have got two coppers on the beat to see that this fellow gives me these things, as he has agreed to give them to me."

Now this merchandising business I say should be coupled up with the wiring job, and it should be talked right along with the wiring, and those two subjects should not be separated in our meetings.

In Chicago we have one meeting for merchandising in a month, and we have sixty-one members who tell me conclusively how the merchandising game may be improved; but they say that we must have a separate institution for it.

Now suppose we approach a house wiring job with a knowledge of merchandising. From your experience in buying and selling irons you know that there are some tricks connected with that proposition, and when you look at a plan, you know how the outlets should be arranged for the different appliances. You may find that the convenience outlet is over in the corner of the room, where the woman has got to stand with her back to the window to use it; and when you go into the dining room, you may find the outlets there are not arranged at all as they should be for the percolators, and toasters, and so on. You are in a position to judge how they should be located for the woman who is going to use those appliances. You might find that the woman would have to be an athlete, in order to use some of those appliances, with the outlets arranged as shown on the plan.

If you want to submit a bid for the wiring job, you should also look into the arrangement for appliances especially.

You get your contractor interested in merchandising, and then by separating the contractor's business from the merchandising, and talking about the enormous amount of service he must do, and the way he must sell this, that and the other, you have got him convinced that he has to have a separate institution for the merchandising, and he doesn't couple the two things together at all.

The first appliance in the home is the vacuum cleaner, and if a woman has to climb

up on the parlor furniture to attach it to the fixture in order to use it, I wonder if the old broom won't soon go back into use again? I think we ought to consider this thing very carefully.

Mr. Gilchrist is a great advocate of merchandising. He has gone to every end that he possibly could think of for the purpose of making our contractors dealers, and he has got me so filled up with that proposition that I have sixty-one dealers on my hands, and they have fairly good looking stores and stocks, but they have all got the idea, because we have talked this matter of servicing so much, that they have got to have the two things separated. All our conventions talk that way, and the articles in your paper, Mr. Watts, are all that way.

Now I am not interested in merchandising to any extent unless it can be used to benefit the contractor, because we are primarily con-

tractors. And I have one thing fixed in my mind, that I got from Bill Goodwin, a good many years ago, and that is that merchandising like any other business will find its natural channel.

If you don't create that natural channel you are not going to get the business, and if your houses are not equipped properly for the use of these appliances, you are not going to sell them. We have got to make a natural channel for these things, and you are not going to make a natural channel unless you are the proper man to service that merchandise when you put it out. And you can't service anything of that kind at your own convenience.

CHAIRMAN SAYLOR: Now gentlemen, our time is up for the discussion of this subject. I certainly appreciate the interest shown here, and as our time is up we will pass to the next subject.

Why I Support My Association

By C. T. SMALLCOMB

Vice President Los Angeles Contractor-Dealer Body Lays Down Far Reaching Benefits Resulting From United Effort

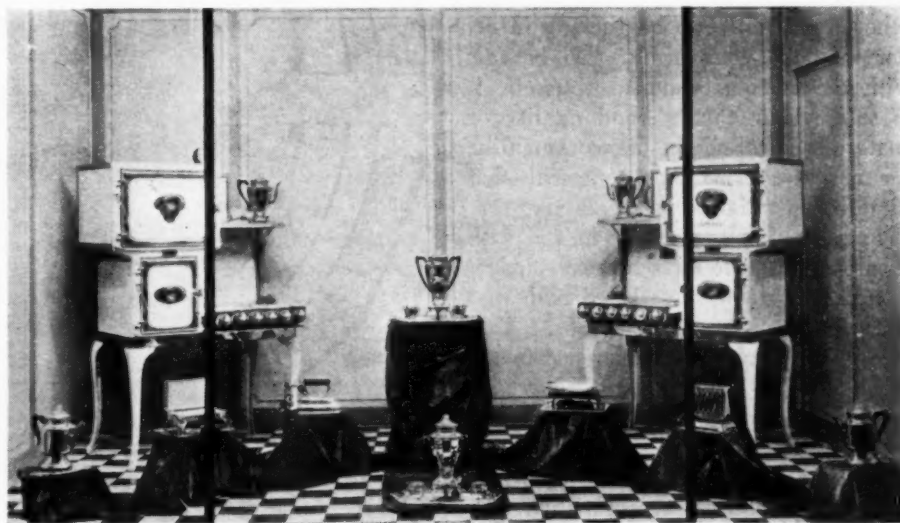
To all of us who are in the electrical contracting business there should be that feeling of giving everybody you come in contact with a square deal. To your jobber you owe a correct account of your assets and liabilities, and to those who extend you thirty, sixty or an unlimited number of days' credit, you should outline your business policies, your way of keeping books, and your way of arriving at the selling price of an installation or piece of apparatus.

All these should be taken up with your jobber in order that he may help you in carrying out a successful business program. For it must be remembered that as a general thing the jobber is old in the business. He can point out or refer back to many electrical contracting derelicts who have gone on

the rocks, or are well on their way, and in most cases he, the jobber, is holding the sack.

Therefore it stands the contractor in good stead to confide in the wise old jobber that he may profit by his experiences. If for no other reason than that of being honest with your jobber and yourself, you should coöperate with him.

Next in line is your competitor. Business without competition does not exist. To be fair with your competitor is essential to successful business. To slander and belittle him is to tear down your own prospects. It lowers the standard of your business, cheapens your character, and this in turn, makes everyone suspect you as well as your competitor. To tell a customer that you



The Westinghouse Electric & Manufacturing Company Trims This Window of Its Los Angeles Office Building Regularly. This Display, a Recent One, Sets Forth a Standard of Refinement and Simplicity Which Electragists Will Do Well to Follow

are there to sell your kind of material, your style of installation, and your kind of service, is being fair with your competitor. The field is no place to unload your feelings regarding certain kinds of competition.

The electrical inspection department should be next considered. What is it that makes so many electrical contractors down on the inspector? My answer is *lack of coöperation*. I do not know one electrical contractor in my city who has trouble with inspections if he tries to do the right thing by this department. It is only the contractor who tries to deceive, tries to get away with some raw deal on a job that is always disconcerting to the inspection department.

There is the exception of the contractor who does not know the requirements except in a misinterpreted manner. It is through the electrical contractors and dealers association that the contractor is able to meet with the heads of the inspection department at their weekly meetings at the association headquarters. What a very splendid opportunity this meeting gives each and everyone of us—that of discussing old and new laws and getting the right interpretation when necessary. What more can one ask.

Now for the customer. As a general rule his education is sadly neglected when it comes to electrical installations, and so is apt to be guided by the lowest price, unless he has the idea of quality in mind or has been price stung before by some ninety day contractor.

To be fair with the customer you cannot use methods to defraud him. I mean by that, to figure and scheme to see how low you can quote him and trust to luck that there will be some other way to slip up on the job in order to make your profit. To be fair with the customer and to yourself, it is self evident that a good quality of material installed in a workmanlike manner at a price consistent with that kind of installation is necessary.

I certainly believe that to be fair with a customer and to have him satisfied, it is necessary to have satisfied help who reflect optimism on their jobs. That means fair wages. In reference to the price of a job, the contractor's overhead should be arrived at intelligently and added to the cost of labor and material and then a fair margin added for profit.

A good installation, a satisfied customer and a profit to the contractor means everything, and until the electrical contractor establishes that reputa-

tion he is going to have hard sledding, slim pickings and more than likely will end up in bankruptcy proceedings.

Now how are we going to bring about a condition of fairness to ourselves with the jobber, the competitor and customer? There is but one answer—coöperation, and coöperation means association. And the Electrical Contract-

ors and Dealers Association is the association.

Let us work out a plan that will carry out the idea signified on the emblem of our Los Angeles Association: "Quality, Service and Responsibility" and then each and everyone of us put our hearts and souls into developing that commendable plan.

This Year's Big Annual Convention

To Be Held at West Baden Springs, Indiana, From September 29 to October 4, Combines Business and Pleasure

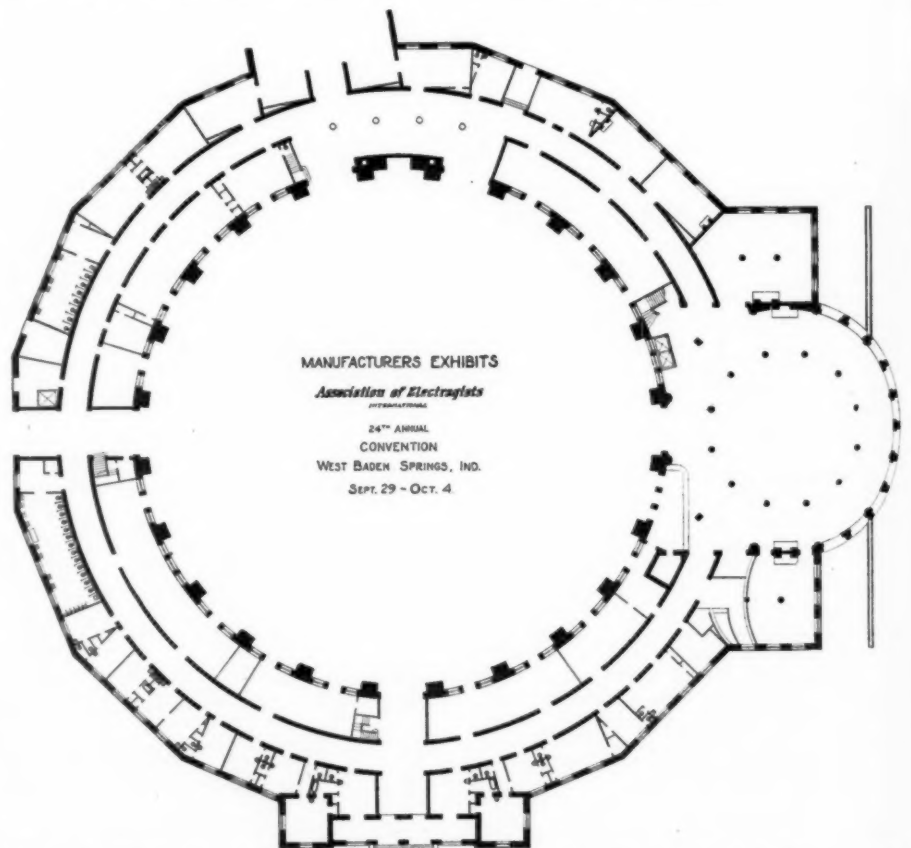
One of the opportunities offered to the attendants of the annual convention of the Association of Electragists next October will be an educational exhibit of electrical materials and devices. All the latest developments will be shown and some of the manufacturers are arranging to give practical demonstrations by having journeymen install certain materials and take them down again, repeating this operation whenever the crowds are assembled.

This then will be a convention the expense of attending which can be justly placed on the credit side of the ledger, as the knowledge gained through these educational exhibits will more than repay those that witness them—

and the recreation features will be thrown in for good measure.

The adopted slogan is "Business and Recreation Happily Combined", and it is planned to carry out the spirit of this slogan to the letter. Now that some thirty or forty manufacturers are interested in arranging these educational exhibits, here is an added attraction that no electrical contractor-dealer will want to miss.

The event is the twenty-fourth annual convention of the A. E. I.; the place is West Baden Springs, Indiana; the time is September 29 to October 4. Many electragists are planning to make this their vacation period and thus combine business and pleasure.



Floor Plan of the Inner Court of the West Baden Springs Hotel. This is Known as the Pompeian Room. It Forms a Great Indoor Garden with a Floor Space of Nearly Forty Thousand Square Feet. Electrical Manufacturers' Exhibits Will Occupy the Store Spaces Surrounding this Majestic Atrium

Harry M. Binder, Omaha, Neb.

Who heads his own business, has been doing electrical contracting since early youth, starting as an apprentice at the age of seventeen. He expects to continue in it, having set as his aim "to grow with growing Omaha." He is a Pennsylvanian, born in Pottstown, October 2, 1885. Graduating from an apprentice in his home town after three and a half years, he ventured over to the neighboring town of Ardmore where he worked a year and then went to Philadelphia. Taking Greeley's advice he went west in 1908 and located in Omaha, doing his first work there for the Burns Electric Company of South Omaha. Two years later he entered the employ of the company of which George W. Johnston of the Midwest Electric Company, was president, and under Superintendent M. N. Murphy was promoted from tools and overalls to office work. Mr. Binder tells of his first estimating experience. He says the company succeeded in getting the job and when the work was finished they were three hours labor to the good with some material to be returned. After six years he went with the LeBron Electrical Works to establish a construction department of that firm. Meeting with success in this venture he decided to go in for himself and his present business, devoted to commercial work exclusively, is the result.



H. M. Binder

Electragists You Should Know



T. J. Minnes

T. J. Minnes, Brantford, Ont.

Was born February 14, in Hamilton, Ontario, forty-five years ago, coming as an infant to Brantford where his present business is located. His first experience was as an apprentice at the plumbing and steam fitting trade, after which he moved around for a few years, and then returned to Brantford and bought out a plumbing and heating business. His firm was among the first to handle electric washing machines, and when local conditions ruined the gas trade in that vicinity, electric ranges were taken up, one of the first to be purchased in the city being sold and installed by them. The stock of electrical supplies was continually added to until now the electrical business equals that done in plumbing and heating. Staples only are carried with the exception of such accessory lines necessary for accommodation purposes. Electragist standards are strictly upheld. Mr. Minnes is a past president of the Ontario Society of Domestic Sanitary and Heating Engineers; vice president, Canadian Society of Sanitary Engineers; and was on the local Board of Health which is considered second to none in the entire Dominion, for three years, two as chairman. He is a charter member of the Kiwanis Club and has been a member of other social and fraternal organizations.

Gas Heaters Boost Business of Electragist

BY RUEL McDANIEL

The Public Thought It Unusual For an Electric Shop to Sell Such Things So They Came in To Investigate—and Then Bought

Admittedly one of the greatest ghosts in the electrical business, or in any retail, manufacturing or jobbing business for that matter, is the peril of seasonal slumps. Occasional slumps would not be hazardous if it were not for the fact that overhead expenses go on just the same, slump or no slump.

Naturally any practical plan that helps to equalize trade throughout the year is given a cordial welcome by the average electrical dealer wherever he is.

The Graham & Collins Electric Company, electragists of San Antonio, Texas, two years ago began searching about for something to take the place of electric fan sales as the warm weather began to give way to chilly autumn evenings. Like several other enterprising electrical dealers, they decided to give gas heaters a trial.

The owners were not at all sure of themselves, however, in regard to the sale of gas heaters, for there was so much competition on the part of department, hardware and furniture stores, so they went into the matter on a conservative basis. They made a deal with a manufacturer whereby the Graham & Collins firm would handle the heaters on a commission basis. The retailer was to get ten percent of the amount of heaters sold, and the remaining stock was returnable at the end of the season. The retailers figured that this was an inexpensive plan of testing the practicability of handling gas heaters and they put enough interest into the sale of the new line to give it a fair test.

The first year they sold 90 stoves, all on commission basis. The line sold well in comparison to the time and money spent in pushing it—so well in fact that the concern took on a regular dealer contract for 1923. Last year they put more time and effort to the new line and easily sold 200. This year they are planning considerably greater things for their gas heater line.

J. L. Guest, manager of the retail department, was instrumental in getting the owners to put in a line of heaters. For many years he was connected with department stores, the policy of which was to handle anything that had a possibility of selling to their customers. Mr. Guest still has some of those department store ideas in his head and he

is working them to advantage in the electrical shop.

"We have a big fan business through the summer," Mr. Guest said, "and naturally there was a considerable slump in the fall when there was no further demand for fans. The logical article to take the place of fans is stoves; but we found that electrical heaters did not meet the needs of all our customers by any means. Many of them wanted larger heating plants. This demand led us to try gas heaters, for we knew that if we didn't fill the demand for larger units than the average electric heater, some other store would get the business. So we tried the plan out in a small way.

There is no doubt in our minds now that gas heaters are a practical part of the electrical dealer's stock. Although we have not made a record in point of sales, we have made a nice profit off the line because it cost us but little extra to sell the two hundred heaters we handled last year. And the cost factor is a big one in determining the practicability of any so-called sideline in the electrical shop.

"At the opening of the heater season, which is when the first autumn cool snap hits us, we arrange a nice window display of stoves in one of our two show windows, and we have two or three placed about our retail sales floor so that customers cannot miss seeing them when they enter the store.

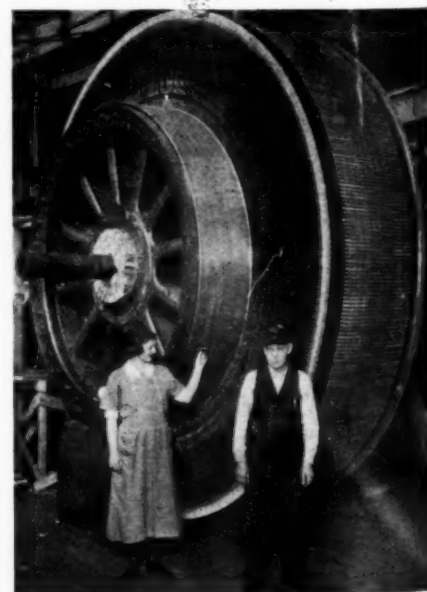
"In order to work up a degree of advance interest in the heaters we print a number of small circulars well ahead of the first cool wave so that they are ready to send out at the logical time. These are small enough to fit in a regular letter size envelope without folding, and are inserted in all letters, statements and bills mailed out for three or four weeks prior to the opening of the regular heater season and for some time after cool weather appears. It costs nothing to distribute these circulars, except the small printing bill, for they fit in all letters and general mail without extra postage.

"We usually make some mention of the heaters in our monthly sales letters which we mail out regularly, and this year we plan on getting out a special

gas heater letter. All our letters are carefully multigraphed, names and addresses filled in on a typewriter, and are mailed out under two cent postage. If we get out this special letter it will be practically the only direct expense we have in selling heaters, so far as advertising is concerned.

"Of course we have a salesman who follows up inquiries by demonstrating a heater in the home, if this is necessary in making the sale. However, we make a greater part of our deals right on the sales floor. We sell only for cash and the customary 30-days open account."

To electrical dealers who have not already tried out a line of gas heaters, the experience of this electragist should prove a valuable suggestion, for rarely does the contractor-dealer of electrical goods have his business so equalized that a line like this will not be of material aid in bridging over the winter lean spots. Few localities there are that have a climate so mild that the average electrical heater fills the demand for a movable heating apparatus; while there are a number of states whose climate is mild enough that a good gas heater will provide ample warmth. Everybody needs a portable heating plant, regardless of climate.



A Study in Armature Contrasts. One Weighs 96,000 Pounds, the Other 6½ Ounces, and Both Were Assembled in the Same Building of the G-E Co.

The Power of the Trade Association

One event during the past month has accentuated the need for strong and vigorous action. That is the threatened imposition of a tax on radio receiving and transmitting sets. As this is being written it is not possible to forecast the final action of Congress on this question but it can be guessed that the tax will not be imposed, at least at this session.

One of the faults in our present system of government is that the people, supposed to be represented in Congress, in reality have to be on the watch all the time to prevent the imposition of unfair burdens.

The people have plainly indicated that they want a reduction in taxes. So they are going to get it. Then, that the Treasury may be provided with the necessary funds, new sources of revenue must be found. The first two that fell under the eye of Congress were radio and mah jong.

But there is no organization among the manufacturers and dealers in mah jong sets, and unfortunately there is not a strong central association in the radio industry capable of shouldering the burden of legislature watching. True, there are associations, but they are young and they do not have the united support of the industry.

In the automobile industry every worthwhile manufacturer but one belongs to the manufacturers' association. The dealers' association numbers among its membership practically all of the best dealers and distributors of the country, and the owners' association has

members by the thousands, divided into state and city groups, thoroughly organized and ready to take appropriate action at an instant's notice.

Contrast these conditions with the radio industry, where there are two or three divided groups of manufacturers who do not have a single purpose in mind, and the hundreds of radio owners' clubs throughout the country that are loosely tied together if at all. The A. R. R. L. has been doing creditable work but it is not universally supported as it should be among owner and amateur organizations.

While the radio tax bill will not likely pass at this session of Congress, it will not be through any lack of opportunity, but rather due to the fact that the situation is too complicated. If a tax were placed on complete sets, then component parts of sets not assembled would be at an advantage and there would be no end of confusion in collecting the tax. And any manufacturer who wanted to evade the tax would need only to leave one part out to make it an incomplete set. A tax placed on all radio equipment would also lead to complications because then storage batteries, switches, dry cells, copper wire, etc., would be taxable when used for radio but not taxable if used for door bells or electric lights.

This is the time for concentrated organization on the part of the radio industry. The coming drive for summer business will do much to bring harmony and mutual welfare to the front and then we will be ready for future attacks whatever they may be.

Work for Summer Radio Sales

Two Sets to Every Prospect is a Slogan That Can Be Fulfilled—This Article Tells How

There is no reason why radio sales should show an excessive slump this summer. Every condition is favorable to more active use of radio than in any summer since the public began to get interested.

In the first place the quality and quantity of broadcasting has improved. It has been variously estimated that since the introduction of the staggered wave lengths there is from two to three times as much transmission on the air as there was this time last year. Stations are able to send more hours of the day because there is not the constant interference that existed under the old 360 meter conditions.

While there are slightly fewer broadcasting stations, yet all of the stations have improved very greatly. They have had more experience in arranging programs, in selecting features and in the mechanical handling of the broadcasting itself.

Greatest Artists Heard on Radio

The greatest artists in the world today are heard on the radio—singing, instrumental selections, dance orchestras, lectures, talks, banquets, conventions and speeches of such famous people as the president of the United States, various cabinet members, congressmen, governors, mayors, etc.

It is hardly possible to look over

the programs for any evening without finding one or two features that you would not care to miss. There is no longer the business of filling in time if the right artist or the right feature cannot be obtained. Every program cannot be the *best* program, but every program is a *good* program as judged from average standards. Just as tastes differ in individuals, so programs must be varied to suit a lot of different kinds of people.

Copyrighted Music Talk Subsided

Most of the excitement about broadcasting copyrighted music has subsided. Music publishers on the whole have found out that it pays well to have music broadcast. Actresses and actors have also found out that the transmitter offers a wonderful means of keeping their names and specialties before a great audience that afterwards finds it desirable to come to the box office with real money in their hands.

These are just a few of the ways and wherefores of better broadcasting and they simply are cited to show that radio interest will keep up to a greater extent than ever before.

The annual bugaboo about radio business being built on sand and going to pieces has been proved to be absolutely false. The radio industry is stronger and richer today than it ever

was. Many of the fly by night manufacturers that naturally infest a new and prosperous industry have been forced out of business by the sheer merit of competing manufacturers.

Prices Becoming Stabilized

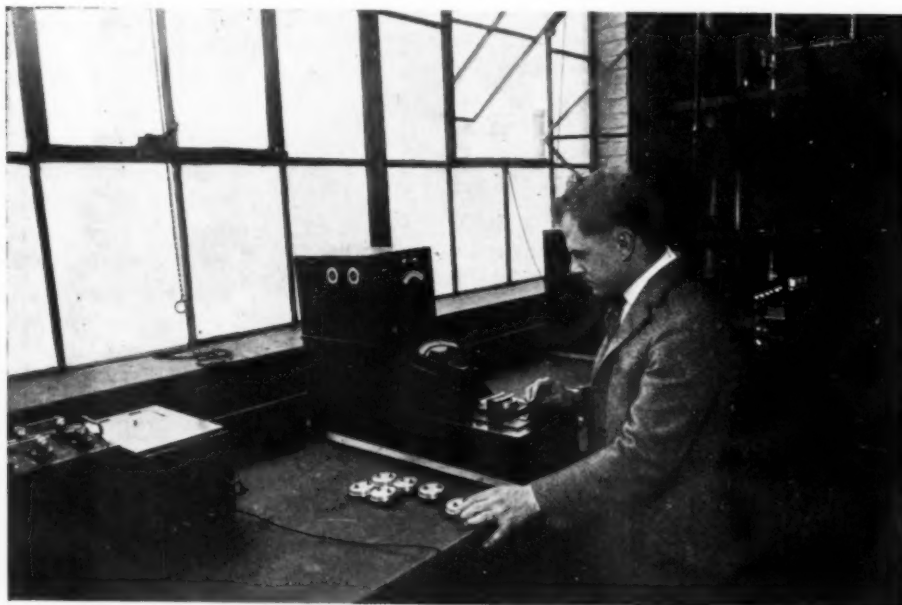
Several progressive manufacturers have forged to the front with articles of merit, good business methods and aggressive selling and advertising. Some of these have several times found it necessary to double their factory facilities and the demand keeps on growing. Wholesale and retail sales connections have been getting straightened out and the merchandising of radio is on a sounder basis than ever before.

Prices are becoming stabilized and with the present low cost of all kinds of equipment from machine screws to complete sets there is less and less sales resistance. It is possible today to purchase a one tube set made by a reliable manufacturer for what a crystal set cost two years ago. There have been some losses along the line in absorbing these depreciated inventories, but as the trade as a whole has not stocked too heavily, these losses have been more than made up in other ways, principally in increased sales.

There is No Saturation Point

Another great help to radio sales is the fact that more and more people are getting acquainted with radio, its pleasures, its benefits and its operation. Just as almost every high school girl today knows how to run a Victrola and clean a spark plug, so she knows how to tune in WEA or WOC. Radio sets do not have the mystery that they had a couple of years ago. People are not deterred from buying because of any doubts about the set working after they buy it. The fact is they are certain that it will work.

Still other cold water carriers have said that the radio will soon reach a saturation point, which means that everybody that wants a radio outfit will have one and then there won't be any more radio sets sold. They said that about the automobile industry every year since 1905 and yet every year with the exception of one war year has showed an enormous increase in the number of automobiles manufactured



In One of Brandes Laboratories, C. E. Brigham Chief Research Engineer, Uses a Visual Test Machine to Determine the Reception Qualities of Delicately Made Receivers

and sold. The saturation point just ain't.

While thousands of families already own radio equipment, there are still many thousands that have yet to buy. And those that already have sets are going to keep getting better ones. The newest slant is that men are buying sets for their offices. Many doctors, dentists and lawyers have one set for the home and another set for the office. Even an electric crane operator on the Erie Railroad at Secausus, N. J., has an antenna rigged up between the end of the crane and the crane house and he has a receiving set that he uses during the time he is not actively engaged operating the crane. Train dispatchers, switch tenders, boatmen, drawbridge tenders, all are going in for two sets, one while at work and one at home.

Two Sets to Every Prospect

Think this over. It is a new slant and will give you a lot of prospects that you didn't know you had.

Two radio sets to every prospect.

Then again, pretty nearly all the calamities that people said would happen didn't happen. They said radio was changing around so much that everybody would be ruined. It did change around a lot. New circuits came out. Radio fans got interested first in one kind of a circuit and then in another. And did anybody get ruined? Not so you could notice it. It simply piled up the sales still more.

They said that when the tube patents ran out there would be terrible price cutting and a lot of worthless tubes on the market at ruinous competitive prices. Well, the patent has run out, but there are a lot of other patents still running on various features of the tube and more are being granted every day. There are some few bootleg tubes on the market but not enough to do any great harm. And the prices of tubes have not gone down nearly as much as on some other products used in the radio business.

All these indications simply point to the fact that there is a better chance to sell radio this summer than ever before. If you are in that condition of mind where you are sure you cannot sell, then you sure cannot sell. But if you will just simply say to yourself, "Here, I have every opportunity to make a killing on this thing," then you are going to succeed.

More radio sales this summer.

Two to a customer.

New Radio Developments to Sell

Here Are a Score of Devices Which Will
Jingle Your Cash Register on Profit Side

Pons Radio Clip

Two continuous electrical paths are provided in the Pons radio clip which is of the double clip type and specially suited to radio and battery work. The current path is unbroken by hinge joints or springs. Made in two sizes, a small nickel finish style for radio and a large lead covered style for battery station work. Made by Eugene Pons, 838 Lincoln Avenue, Schenectady, N. Y.

Crosley Trirdyn Receiver

The newest receiving set to be brought out by the Crosley Radio Corp., Cincinnati, Ohio, is the Trirdyn, which is priced at \$65. The receiver has tuned radio frequency amplification, a regenerative detector reflexed back on the first tube and an additional stage of audio frequency amplification. Although there are but three tubes, it is said the results approximate the use of five tubes. The set is non radiating and will not interfere with other receivers in the neighborhood. There are only two controls. There are two rheostats, one controlling the detector and the other both the amplification tubes. The same set with a different style of cabinet will be offered later for \$75.

Stuart B Battery

The line of Stuart B batteries is covered with an imitation alligator leather which adds to the appearance of the battery for drawing room use. The batteries are made in a number of combinations among which are the 22 1/2 volt variable with six binding posts.



22 1/2 volt two tap small, 22 1/2 volt six tap, 22 1/2 volt upright and 45 volt variable. A line of C batteries is also made. The illustration shows the No. 5683 large 22 1/2 volt variable with six binding posts, size 6 5/8 x 3 x 4 1/8

inches. Made by the Stuart Products Corp., Chicago.

Marle Dial Pointers

Most receiving sets have no mark on the panel back of the dial, or the mark is simply a scratch which is hard to see. The Marle pointer is a raised nickel arrow which is easily mounted on the panel and is especially useful in neutrodyne sets where the setting has to be quite accurate. To mount, the panel is drilled and screw is inserted from the back. Made by the Marle Engineering Co., Orange, N. J. Price 15 cents each. A counter display and card proposition is available for dealers.

Branston Kit No. R-99

This is a kit of receiver parts for super heterodyne construction. The kit contains an oscillator coupler, three intermediate radio frequency transformers, a special transfer coupler and a coupler for use with antenna. The price of the kit is \$36.50 and a booklet on super heterodyne construction is \$1. Made by Charles A. Branston, Inc., Buffalo, N. Y.

Jewell Double Reading Voltmeter

A single instrument for taking voltage readings of both A and B batteries is made by the Jewell Electrical Instrument Company of Chicago. The scale is double reading, 0-12 volts below and 0-120 volts above. There is a common terminal at the left and separate terminals for the low and high voltage. No. 57 table type lists at \$10, No. 54 panel mounting type, \$8.50.

CIC Floating Mica Diaphragm

Used in head phones, phonograph attachments, etc., CIC floating mica diaphragm floats between resilient cushions so that its vibrations will not be held down. Made by the Connecticut Instrument Co., Stamford, Conn.

Gled Radio Receiver

The Gled T7 radio receiver is built from designs developed by the U. S. Bureau of Standards. It is suitable for use with either outside or inside antenna and with either wet or dry batteries. A newer model, the Portaradio, a portable receiver with tubes weighing only 24 lb. will be ready for the market shortly. Made by North American Radio Corp., 5 Columbus Circle, New York City.

R. C. Condensers

R. C. condensers are made with hard aluminum plates, accurately spaced. Both variable and vernier types are available. The company manufactures condensers exclusively. Made by Radio Condenser Co., Inc., Camden, N. J.

Twin Two Cell Battery

A new 1½ volt A battery completely enclosed in a rubber case is announced by the Twin Dry Cell Battery Co., 220 Broadway, New York City. Made in all sizes to fit various radio requirements. Price 85 cents.

Non Solder Switches and Jacks

A complete line of switches and jacks on which soldered connections are not required is made by the Metro Electric Mfg. Co., Inc., 121 Prince Street, New York City. The panel switch lists at 40 cents, double jack 60 cents and single jack 35 cents.

Eisemann Type RF-2 Receiver

A receiving set employing radio frequency amplification is now being introduced by the Eisemann Magneto Corp., Brooklyn, N. Y. The circuit is transformer coupled tuned radio frequency with two stages of audio frequency amplification. There are but two controls and sensitivity is combined with selectivity. The assembly is encased in solid mahogany. The price is \$110.

WorkRite Neutro-Grand Receiver

A five tube neutrodyne radio receiver is now being marketed by the WorkRite Mfg. Co., Cleveland, Ohio, known as

the Neutro-Grand. The loud speaker is built into the receiver and reception is claimed from all points in the country. The set is licensed under the Hazeltine patent.

C R L Non Inductive Potentionometer

A non inductive potentionometer to bias the grids of the radio frequency amplifiers is being made by the Central Radio Laboratories, 305 Sixteenth Street, Milwaukee, Wis. The potentionometer is shunted across the A battery and the grid return for the first radio stage is connected to the sliding contact or middle binding post. No bypass condenser is needed. No. 110, 400 ohms sells for \$1.75. No. 111, 2000 ohms is priced at \$2.

Brach Complete Antenna Set

A complete radio antenna set comprising aerial, insulators, lightning arrester and in fact everything down to the last screw necessary to erect an antenna is included in the 10 in 1 package now being put out by the L. S. Brach Mfg. Co., Newark, N. J. The company has long been manufacturing the Brach lightning arrester which is included in the set. The price of the complete outfit is \$6. All parts conform to the requirements of the National Board of Fire Underwriters.

Myers Tubes

This is a different type tube from the conventional vacuum tube in that it is very small and has contacts at two ends instead of the nested contacts on the conventional tube. This is claimed to

give greater distance and selectivity. Made in both storage and dry battery types and furnished complete with clips to mount on the set. No sockets or other equipment are required. Made by E. B. Myers Co., Ltd., 240 Craig Street, Montreal, Canada. Price, \$5 each.

Thor Reproducer

Instead of a horn this loud speaker is made in the form of a torchiere, floor or table lamp to harmonize with the other fittings of a living room. It is non directional and distributes the sound to all parts of the room equally. Prices vary with the different models, one torchiere listing at \$50. Made by the Thor Radio Co., Claus Spreckles Bldg., San Francisco, Calif.

New I. R. E. Officers

The election of the Institute of Radio Engineers resulted in the following officers being chosen for 1924: J. H. Morecroft, president; J. H. Dellinger, vice president; W. F. Hubley, treasurer; board of managers, A. H. Grebe and H. W. Nichols. Other members of the board are: Melville Eastham, Edward Bennett, L. A. Hazeltine, Donald McNicol and Lloyd Espenschild. Dr. A. N. Goldsmith was reappointed secretary.

New York Show in Fall

Final arrangements have been made for the radio show, which will open at Madison Square Garden, New York City, on Monday, September 22, and continue until Sunday night, September 28. The exposition will be held under the auspices of the Radio Manufacturers Show Association, which is composed of sixty radio manufacturers.

The Radio Manufacturers Show Association will hold three expositions next season. The first will be in New York, at Madison Square Garden; the second will be in Chicago, at the Coliseum, November 18 to 23, and the third will take place on the Pacific Coast early in 1925.

Blue Book of Radio

"Simplicity of Radio" by Powel Crosley, Jr., known as "The Blue Book of Radio," contains information about the principles of radio, written for the layman, with illustrations and diagrams that are easily understandable. Free copies may be had by writing to the Crosley Radio Corporation, Cincinnati, Ohio.



That Radio Has a Universal Appeal is Proved Daily. Electragnists in all Parts of the Country Are Continually Finding New Markets for Equipment of the Silent Drama. Here is Pretty Virginia Valli, Who Takes the Leading Role in the Picture "A Lady of Quality," Catching the Air Waves' Messages With a Betts Receiving Set

Chats on the National Electrical Code

BY HUBERT S. WYNKOOP, M. E.

Monthly Discussion of National Electrical Code Practices by Well Known Authority in Charge of Electrical Inspection, City of New York

Solderless Connectors

A lot of us old timers die hard when it comes to accepting a solderless connector—or “mechanical splicing device”—as a substitute for a soldered joint. The trouble with us is that we learned the trade when a soldered joint was a soldered joint. Now it's any old kind of a hook up smeared with a touch of solder—perhaps. On the whole the worst solderless connector that I have seen is probably better than the average spliced and soldered joint found on many joints today.

And besides this: the connector makes it much easier to hunt trouble, and to restore the connections after the trouble has been found.

Condulet or Pothead

Is a condulet a device equivalent to a pothead. Section 404b requires that “the inner end of service conduit shall enter the service cabinet, or be made up directly to an equivalent device.” The conduit, if insulated, need not be electrically connected to the cabinet. With an insulated service standpipe the conduit would serve as a terminal fitting; but with an underground service from a pole line the conduit cannot be considered insulated and therefore must be run directly into the cabinet, no condulet being used.

Section 404d, however, applies to grounded service conduits leading from an underground distribution system. Here the conduit must be led into the cabinet and must also be sealed to prevent the entrance of gases. The condulet admits of sealing, but does not provide for electrical connection to the cabinet; so, except in the case of the larger services, it is not available. A pull box filled with sealing compound is best.

Single Pole Switching

The Code never prohibited single pole switching of ordinary 660 watt circuits. Nor does it today prohibit single pole switching of branch lighting circuits. Under 15 amperes, the limit of current which may be switched single pole (or three-way or four-way) is fixed by the rated capacity of the

particular switch. A study of section 1204 will bring out a number of interesting ideas—one of which is that double pole switching of lighting circuits located in a damp place is no longer required. But double pole switching must be provided generally for motor or heater circuits.

Border Lights

The 1920 Code required a thickness of not less than No. 20 U. S. sheet metal for the entire border. The 1923 Code calls for this thickness for the trough containing the wires, and goes on to say, “Shall be so designed that the flanges of the reflectors or other adequate guards will protect the lamps from mechanical injury and from accidental contact with scenery or other combustible material. Obviously the intent is not to require No. 20 gage iron for the flanges of the reflectors if a lighter weight of metal is so designed or reinforced as to serve as a substantial guard.

Stage Pockets

The Code still requires that stage and gallery pockets shall make provision for arc lamps, as well as for incandescent lamps. Arc lamps have pretty nearly disappeared from the stage, having been superseded by the high power incandescents; but they are still found to be indispensable for spots in the gallery. The rule therefore is still pertinent for gallery pockets. But for the stage there is no longer need for arc receptacles, nor for 35 ampere circuits. However, architects are still calling for and contractors are installing arc pockets and arc circuits for the stage.

Steel Wool Combustible

Here's the latest. Steel wool burns like a Christmas tree! If you don't believe it, try it. In one of our local steel wool factories a workman carrying a bundle of steel wool brought it into contact with live metal parts. The short circuit caused him to drop the bundle which kept on burning vigorously. Investigation seems to show that it is the fine dust and oil in the

wool which mix with the air and become inflammable.

Wires in 1/2 Inch Conduit

The table (503m) says there should be only three No. 14 wires in 1/2 inch conduit. The note under the table says four. But the table evidently includes double braided wire, while the note specifically applies only to single braided. According to the Code therefore we may place one duplex (double braided) and one single conductor (either single or double braided) in a 1/2 inch conduit, while if we use four single conductors (which would naturally be single braided) we may place them in 1/2 inch conduit. Has anyone a better explanation of the apparent discrepancy between the table and the note?

Reverse Phase Relay

Section 308f (erroneously designated as e) calls for a reverse phase relay for an alternating current motor operating an elevator or a crane. Section 3006c permits two motors operating a crane bridge to be protected by a single automatic. Must there be a reversible relay for each motor, or may there be one for the pair?

I am inclined to believe that one relay is sufficient. The purpose of a relay is to prevent reversed or single phase operation. The reversing may occur at any point on the system, and the single phasing at any fuse. If the relay is placed at the ultimate cutout, it ought to care for every case except wrong connections made at the motor. But when the wireman connects up he tests out by operating and can thus catch a mistake before it causes any damage.

Motor Wiring Tables

I am beginning to believe that, after all, a set of tables specifying the sizes of wires required for motors of various types and capacities ought to be included in the Code. For some years I have resisted this idea on the ground that such tables would have to be based on averages and would therefore not care for the extreme cases; where they did not, the conductors would have to

be overfused. But the need for uniformity is so pressing and the practical experience has become so extensive that I think we can safely adopt tables of motor wiring, either with or without a saving clause which will secure proper fusing in extreme cases.

Identified Wire in Signs

Underwriters Laboratories announce tentatively the following addition to the Sign Standard:

Circuit wires connected to screw shell terminals of receptacles must have a white or natural gray finish. Circuit wires connected to center contact of receptacles must be of a color readily distinguishable from white or natural gray. If white or natural gray braid is used in the covering of circuit wires connected to center contact, at least 1/4 of the braids must be made up of colored strands, preferably black, laid adjacent in the braid so as to show a solid spirally laid color.

Lighting Growth in 1923

The volume of sales of incandescent lamps serves as a reasonably accurate measure of the expansion of the lighting business, according to a statement of the General Electric Company. It is estimated that about 225,000,000 large tungsten filament lamps were sold in the United States during the year 1923. This is nearly an 11 percent increase over 1922, and exceeds any previous year. The figures do not include the sale of miniature lamps which are used

in large numbers for automobiles, flashlights, etc. The sales of carbon lamps are also excluded, since they have shrunk to an insignificant number.

Since the advent of the Mazda C lamp, with its larger sizes and greater efficiency, the simple numerical measure has ceased to show the expansion as regards wattage consumed or light supplied. This is indicated by the following tabular comparison of the lamps sold in 1923 with those of 1907, when the tungsten filament lamps first appeared on the market.

The healthy growth of the miniature lamp business during the year is indicated by the increase in sales to about 110,000,000 as compared with 85,000,000 for 1922; that is, about 30 percent. Of the lamps sold in 1923, about 20 percent were for flashlight service, 12 1/2 percent for Christmas tree decoration and 65 percent for automobile service, the remaining 2 1/2 percent being of miscellaneous types.

While the need for more and better lighting in homes has been obvious to illuminating engineers, the magnitude of the problem and the demand for individuality has made it difficult to advance the practice. During the year unusual progress was made in improving the lighting of kitchens, in connection with certain enclosing luminaries. The results proved so successful that campaigns are being undertaken throughout the country which will serve to teach the possibilities of lighting in other parts of the home where standardization is not practicable.

Store lighting activities in Chicago last year are significant. Lighting units selected with reference to engineering characteristics were aggressively promoted by the lighting company through commercial channels, and as a result the Chicago stores spent \$800,000 (or 45 percent) more for electricity than in any preceding year. The previous survey had classified 70 percent of the Chicago stores as poorly lighted, although presumably as well lighted as those in other cities.

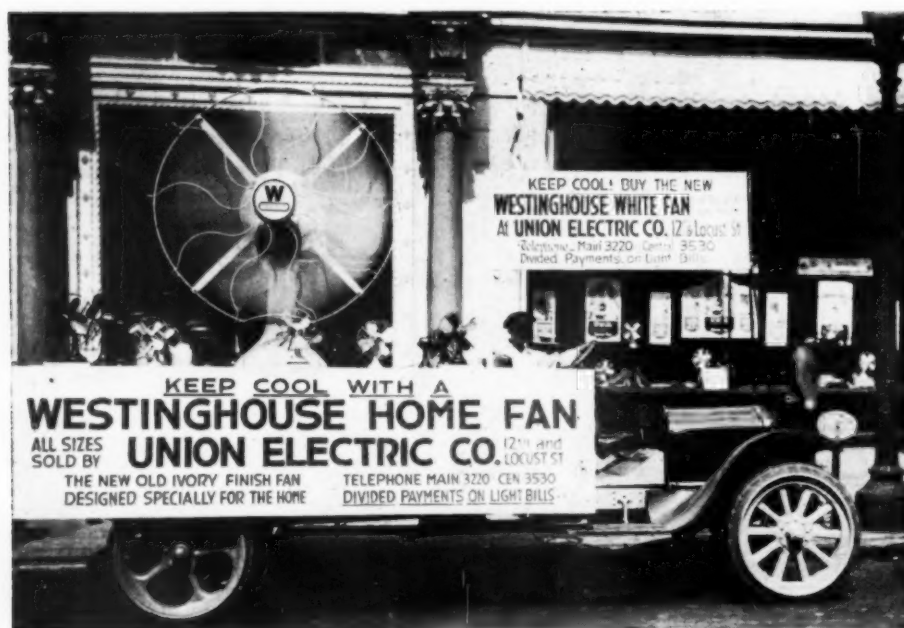
Industrial Lighting

"Twenty five percent of shop accidents are produced by improper illumination," says Dr. Frank Allport of the American Society of Safety Engineers, discussing industrial eye injuries. You should appreciate the sale significance of this statement, as an electragist. Make a little survey and see if you cannot do some profitable business by installing correct lighting in the industrial plants of your town which now are improperly lighted. Mr. Allport is an authority on this subject and you may be sure that his claims are backed by figures. The following statements by him are illuminating and give you sale points to use in talking to prospects:

The proper illumination of shops is unquestionably of very great importance in the prevention of accidents, and is a subject that is constantly assuming larger proportions in the minds of shop owners, architects and illuminating engineers.

Insufficient illumination can undoubtedly produce diseased ocular conditions, but so also may excessive and improperly directed illumination. Not only should illumination be ample, as provided by enormous window spaces and by the best kind of artificial lighting, but it should be properly directed so that each bench, wheel, vat, machine, etc., is individually well lighted and shaded so that the men can see distinctly and work without ocular effort, and almost automatically. Illumination should be evenly diffused and should not fall directly into the eyes. It should come from above, behind and from the left. It should not throw shadows on the work.

Improper illumination produces mistakes in work, wastage of material and a greater liability to accidents. The smallest number of accidents occurs in July and August because these months furnish more daylight than any other months in the year.



This Method of Creating Sales Was Conceived by the Union Electric Co. of St. Louis. Wherever the Truck Went Great Crowds Gathered to See the Clever Demonstration

"Your Friend the Architect"

Can you truthfully say that the architect of your city is your friend? Or do you feel that he ignores your interests, fails to understand your problems and draws plans or writes specifications that make it difficult for you to safely estimate the job and do the work as he lays it out?

But do you really know the architect or does he know you? Have you ever been to see him excepting when you are after a job? Have you ever *helped* him to understand how you would like the electrical work indicated on plans?

The architect has to indicate the work of *all* the building trades in his plans. He has to know *something* about all of them—but you cannot expect him to know *all* about your special branch.

The architect is just like the rest of us—a little bit touchy when someone condemns us, particularly behind our backs, but glad to see our friends and talk over the things that are mutually helpful, when we have really gotten acquainted with each other.

The best way to get acquainted with your architect and to find the door of his office always open to you is to take him something of practical, constructive value to *him*. Let him see that you

feel that your interests are mutual and you will find a readiness on his part to cooperate with you.

An opportunity presents itself now to go to your architect with just such a helpful offer. The new "Standard Symbols for Wiring Plans," after nearly two years of work by the Association of Electragists, International, the American Institute of Architects, and the American Institute of Electrical Engineers, were approved in March by the American Engineering Standards Committee.

The Association of Electragists, besides sending copies of the symbols to all of its members for their Electragists' Data Books, has printed the Standard Symbols on heavy cardboard 8 1/4 x 13 1/4 in size, punched to hang over the architect's drafting table. These cards may be obtained from the Association of Electragists at 10c each, twelve for \$1. They provide a place at the bottom for your name with your compliments.

Get a supply of the "Standard Symbols for Wiring Plans" on these special cards and go and see your friends the architects. You will find their doors wide open to you and the better acquaintanceship a valuable asset.

Lawrence W. Davis

	Ceiling Outlet
	Ceiling Outlet (Gas and Electric)
	Ceiling Lamp Receptacle <small>Specification to Describe Type Such as Key, Keyless or Pull Chain</small>
	Ceiling Outlet for Extensions
	Ceiling Fan Outlet
	Pull Switch
	Drop Cord
	Wall Bracket
	Wall Bracket (Gas and Electric)
	Wall Outlet for Extensions
	Wall Fan Outlet
	Wall Lamp Receptacle <small>Specification to Describe Type Such as Key, Keyless or Pull Chain</small>
	Single Convenience Outlet
	Double Convenience Outlet
	Junction Box
	Special Purpose Outlet <small>Lighting, Heating and Power as Described in Specification</small>
	Special Purpose Outlet <small>Lighting, Heating and Power as Described in Specification</small>
	Special Purpose Outlet <small>Lighting, Heating and Power as Described in Specification</small>
	Exit Light
	Floor Outlet
	Floor Elbow
	Floor Tee
S^1	Local Switch—Single Pole
S^2	Local Switch—Double Pole
S^3	Local Switch—3 Way
S^4	Local Switch—4 Way
S^D	Automatic Door Switch
S^K	Key Push Button Switch
S^E	Electrolier Switch
S^P	Push Button Switch and Pilot
S^R	Remote Control Push Button Switch
	Tank Switch
	Motor
	Motor Controller
	Lighting Panel
	Power Panel
	Heating Panel
	Pull Box
	Cable Supporting Box
	Meter
	Transformer
	Branch Circuit, Run Concealed Under Floor Above
	Branch Circuit, Run Exposed
	Branch Circuit, Run Concealed Under Floor

	This Character Marked on Tap Circuits Indicates 2 Number 14 Conductors in $\frac{1}{2}$ " Conduit
	This Character Marked on Tap Circuits Indicates 3 Number 14 Conductors in $\frac{1}{2}$ " Conduit
	This Character Marked on Tap Circuits Indicates 4 Number 14 Conductors in $\frac{3}{4}$ " Conduit Unless Marked $\frac{1}{2}$ "
	This Character Marked on Tap Circuits Indicates 5 Number 14 Conductors in $\frac{3}{4}$ " Conduit
	This Character Marked on Tap Circuits Indicates 6 Number 14 Conductors in 1" Conduit Unless Marked $\frac{3}{4}$ "
	This Character Marked on Tap Circuits Indicates 7 Number 14 Conductors in 1" Conduit
	This Character Marked on Tap Circuits Indicates 8 Number 14 Conductors in 1" Conduit

NOTE—If larger conductors than number 14 are used, use the same symbols and mark the conductor and conduit size on the run.

	Feeder Run Concealed Under Floor Above
	Feeder Run Exposed
	Feeder Run Concealed Under Floor

	Pole Line
	Push Button
	Buzzer
	Bell
	Annunciator
	Interior Telephone
	Public Telephone
	Clock (Secondary)
	Clock (Master)
	Time Stamp
	Electric Door Opener
	Local Fire Alarm Gong
	City Fire Alarm Station
	Local Fire Alarm Station
	Fire Alarm Central Station
	Speaking Tube
	Nurse's Signal Plug
	Maid's Plug
	Horn Outlet
	District Messenger Call
	Watchman Station
	Watchman Central Station Detector
	Public Telephone—P B X Switchboard
	Interconnection Telephone Central Switchboard
	Interconnection Cabinet
	Telephone Cabinet
	Telegraph Cabinet
	Special Outlet for Signal System <small>As Described in Specification</small>
	Battery
	Signal Wires in Conduit <small>Concealed Under Floor</small>
	Signal Wires in Conduit <small>Concealed Under Floor Above</small>

Standard Symbols for Wiring Plans—As recommended and adopted by the Association of Electricians, International, the American Institute of Architects and the American Institute of Electrical Engineers, and approved by the American Engineering Standards Committee on March 6, 1924.

NOTE—These symbols printed on heavy cardboard, punched for hanging, 10 cents each; 12 for \$1.00.

ASSOCIATION OF ELECTRICIANS, 15 W. 37TH ST., NEW YORK, N. Y.

ORGANIZATION ACTIVITIES

STATE CHAIRMEN AND SECRETARIES

State	Chairman	Secretary	State	Chairman	Secretary
Ontario, Canada:	Harry G. Hicks, 203 Church St., Toronto	J. A. McKay, 24 Adelaide St., W., Toronto	Maryland:	A. C. Brueckmann, Keyser Bldg., Baltimore	C. Philip Pitt, 7 St. Paul St., Baltimore
British Columbia:	S. E. Jarvis, 570 Richards St., Vancouver	R. A. Graham, 929 Pender Street, W.	Michigan:	Henry Roseberry, 41 Pearl St., Grand Rapids	H. J. Shaw, 613 Lincoln Bldg., Detroit
California:	Victor Lemoge, San Francisco	Walter F. Price, 3188 Call Bldg., San Francisco	Missouri:	A. J. Dunbar, Frisco Bldg., St. Louis	G. E. Haarhaus, St. Louis
Colorado:	J. Fischer, 213 15th St., Denver	H. Alex Hibbard, E. & C. Building, Denver	New Jersey:	Geo. E. Davis, 23 Central Ave., Newark	H. F. Janick, 29 St. Paul St., Rochester
Connecticut:	Tryon Smith, 247 State St., New London	H. R. Harper, 635 D St., N.W., Washington	New York:	F. A. Mott, 29 St. Paul St., Rochester	F. E. Robinson, Charlotte
District of Col.:	Frank T. Shull, Elliott St., Washington	L. D. Little, Orlando	N. & S. Carolina:	N. L. Walker, Raleigh	Walter R. Keefer, 939 E. McMillan St., Cin'nati
Florida:	Preston Ayers, Orlando	A. I. Clifford, 507 Odd F. Bldg., Indianapolis	Ohio:	C. L. Wall, 212 S. Main St., Akron	M. G. Sellers, 1518 Sansom St., Philadelphia
Indiana:	T. F. Hatfield, 102 S. Meridian St., Indiana's	Arthur Tucker, 619 Jackson St., Topeka	Pennsylvania:	R. W. Keck, Allentown	J. A. Fowler, 118 Monroe Ave., Memphis
Iowa:	Louis L. Corry, 510 Brady St., Davenport	I. G. Marks, 624 Carondelet St., N. Orleans	Tennessee:	P. W. Curtis, Chattanooga	H. M. Northrup, 25 Erie St., Milwaukee
Kansas:	C. S. Smallwood, 1017 N. 5th St., Kansas City		Wisconsin:	L. W. Burch, 202 E. Wash'n Av., Madison	
Louisiana:	Robley S. Stearnes, 624 Carondelet St., N. Orleans				

LIST OF LOCAL ASSOCIATIONS AND MEETINGS

STATE AND CITY	LOCAL SECRETARY	STREET ADDRESS	TIME OF MEETING	PLACE OF MEETING
ALABAMA				
Birmingham	J. R. Wilcox	313 North 19th St.	Tuesday 10 a. m.	Members' Stores
Montgomery	P. W. Crump	14 S. Court St.	Mondays	
ARIZONA				
Phoenix	F. C. Hoepfner	Hoepfner Elec. Co.		
CALIFORNIA				
Anaheim	Mr. Waite		Each Week, Friday	Ontario
Covina	F. Rambo		1st & 3rd Monday	Goodfellow's Grill
Fresno	Clyde F. Smith	1162 Broadway	Noon Daily	Garden Grove Hotel
Fullerton	J. A. Lenzinger	Brea, Calif.	Thursdays	Recreation Park
Long Beach	E. Cummings	So. Cal. Edison Co.	Tuesdays	1109 1/2 S. Hill St.
Los Angeles	Helen I. Mikesell	1109 1/2 S. Hill St.		Builders' Exch.
Oakland	Lawrence R. Chilcote	351 Twelfth St.	Tuesday 8 p. m.	States' Cafe
San Francisco	E. E. Browne	313 Fifth St.	12 Noon, Thursday	Cham. Com. Bldg.
South Pasadena	J. Jacobs	1128 Mission Street		
COLORADO				
Colorado Spring	Matt Whitney	208 N. Tejon St.	On Call	E. & C. Building
Denver	Alex. Hibbard	E. & C. Building	2nd Tues. and 4th Thurs.	Commerce Club
Pueblo	H. Ashcraft		2nd Tuesday	
CONNECTICUT				
Hartford	A. A. Angello	473 Park St.	First Tuesdays	Hotel Bond
Waterbury	D. B. Neth	Conn. Light & Power Co.	2d Tuesday Evening	
DISTRICT OF COLUMBIA				
Washington	R. W. McChesney	Munsey Bldg.	2d Thursday	Potomac Elec. Power Co.
FLORIDA				
Jacksonville	M. A. Ladd	Stinson Electric Co.	1st Tuesday	108 W. Bay Street
Miami	C. E. Pullen	Pullen-Zohl Co.		
GEORGIA				
Atlanta	W. C. Drake	Ga. Ry. & Power Co.	12:30 Friday	Dafodil Res.
Savannah	Sylvan M. Byck	141 Bull Street		
ILLINOIS				
Chicago	J. W. Collins	179 W. Washington St.	4th Wednesdays	11 S. LaSalle St.
Master Contra. Ass'n.	F. J. Boyle	31 West Lake St.		
Decatur	E. O. Weatherford	114 E. William St.	1st Wednesday	Y. M. C. A.
East St. Louis	C. F. Broderick	317 E. Broadway	Saturday 2 p. m.	Arcade Building
La Salle	Edward Blaine		1st & 2nd Tuesday	Post Hall
Peoria	L. B. Van Nuys	238 S. Jefferson St.	Mondays	Endres Hotel
Quincy	John Harbison	18th & Broadway	2d & 4th Wednesday	214 1/2 No. 6th Street
Rock Island	John Weishar		Monthly	
Springfield	Chas. A. Meador	407 E. Adams St.		
Streator	William Schroder	613 Tyler Street		
INDIANA				
Evansville	O. P. Seitz	1814 Riverside Ave.	Mondays	Members' Offices
Gary	A. B. Harris	570 Washington St.		
Indianapolis	R. E. Snyder	704 N. Alabama St.	1st and 3rd Tuesdays	Chamber of Commerce
Peru	J. B. Johnston	West 5th Street	2d & 4th Monday	Labor Hall
South Bend	Mr. Moran, Jr.	832 N. St. Louis	1st Tuesday	B. & T. Ex. Building
Terre Haute	Carnoy Chess	523 Ohio St.	1st Thursdays	Asso. Bldg. Cont.
Warsaw	L. F. Meyers	120 E. Market St.	Wednesday Evening	
IOWA				
Davenport	Louis F. Cory		Monday 6 p. m.	Chamber Com.
Sioux City	E. A. Artz	211 Fifth St.	Monday 6 p. m.	Members' Offices
Waterloo	H. L. Hileman	600 Bluff Street		
KANSAS				
Arkansas City	E. C. Simmons		Mondays	Members' Offices
Salina	Geo. H. Shank	146 S. Santa Fe Ave.	1st Thursday	Elks' Club
Topeka	H. S. Lee	816 Kansas Ave.	Monday Noon	United Elec. Co.
Wichita	L. A. Harris	446 North Main	Every Tuesday 7:30	
KENTUCKY				
Louisville	Chas. Daubert	921 S. Third St.	Tuesdays	B. of T. Building
Paducah	W. R. Kitterjohn		Last Thursday	
LOUISIANA				
New Orleans	S. J. Stewart	531 St. Joseph St.	2 p. m. Monday	612 Gravier St.
Shreveport	R. L. Norton	620 Marshall St.	Wednesdays	Builders' Exchange
MAINE				
Portland	Lyman P. Cook	12 Free Street	On Call	Graymore Hotel
MARYLAND				
Baltimore	George Robertson	Park Bank Bldg.	2d and 4th Thursdays	Southern Hotel
MASSACHUSETTS				
Fitchburg	R. M. Gowell		1st Monday	Fay Club
Haverhill	H. W. Porter	24 West St.	2nd Monday	El. Light Station
Malden (Everett & Medford)	Harry J. Walton	Malden Elec. Co.	Monthly	Malden Elec. Co.
Newton	C. L. Howe	897 Washington St.	2d Monday ea. month	Various Places
Pittsfield	Wm. J. Cullen	West St.	Monthly	Members' Offices
Springfield	A. R. Tulloch	11 Court House Pl.		Chamber of Comm.
Worcester	J. W. Coghlín	259 Main St.	2d Thursday	44 Front Street
MICHIGAN				
Detroit	H. Shaw	613 Lincoln Building	Last Thursday	G. A. R. Hall
Flint	J. Markle	718 S. Saginaw		
Grand Rapids	Henry Romyn	40 Ionia Av., N. W.	Tuesday Noon	Association of Com.
Kalamazoo	M. Randall	Exchange Place		Chamber Commerce
Saginaw	E. T. Eastman	209 Brewer Arc.		

THE ELECTRAGIST

ORGANIZATION ACTIVITIES—(Continued.)

STATE AND CITY:	LOCAL SECRETARY	STREET ADDRESS	TIME OF MEETING	PLACE OF MEETING
MINNESOTA				
Duluth	D. Ehlert	210 W. 1st St.	Subject to Call	Builders' Exchange
Minneapolis	W. I. Gray	511 S. Third St.	2d & 4th Monday	Elk's Club
St. Paul	E. Hoseth	993 Selby Avenue	2d & 4th Tuesday	
MISSOURI				
Kansas City	A. S. Morgan	4 E. 43d Street	2d and 4th Tues.	University Club
St. Louis	E. Bowman	644 Century Building	1st Wednesday	American Hotel
NEBRASKA				
Lincoln	G. G. Kingham	142 S. 12th Street	1st & 3rd Monday	C. of C. Building
Omaha	E. H. Brown	1818 Harvey St.	2d and 4th Thursdays	Builders' Exchange
NEW HAMPSHIRE				
Portsmouth	F. C. Hatch	Kittery	2d & 4th Wednesdays	
NEW JERSEY				
Atlantic City	F. P. Wright	16 Ohio Ave.	1st Thursday	Malatesta Hotel
Jersey City	Wm. Doellner	843 Bergen Ave.		P. S. Building
Long Branch	Chas. Maggs	462 Bath Ave.	1st & 3rd Mondays	Commercial Hotel
Newark	John J. Caffrey	435 Orange St.	1st Monday	283 Plane St.
Paterson	H. M. Desaix	88 Ellison St.	Last Friday	P. S. Building
NEW YORK				
Albany	E. A. Stephens	71 Trinity Place	3rd Thursday	Pekin Restaurant
Binghamton	A. H. Hyle			
Brooklyn	H. F. Walcott	Pacific St. and 3d Ave.	1st & 3rd Wednesdays	Johnston Building
Electric Club	A. Stone	503 Myrtle Ave.		
Buffalo	H. H. Howell	54 Niagara St.		
Cooperstown	B. B. St. John	Oneonta	3rd Tuesday	Vanon
Endicott	A. H. Hyle	Binghamton	Tuesdays	Chamber Commerce
Glens Falls	W. F. Coombs	21 Main Street, S.	3rd Monday	Black Bear Rest.
Jamestown	Henry Lund	309 Main Street		
Nassau-Suffolk	Edwin M. Seaman	Minola		
New Brighton	E. L. Taylor	Tottenville		
N. Y. Section, No. 1	J. W. Hooley	45 Barclay Street	1st Thursday	Building Trades
Independent	Albert A. A. Tuna	127 East 34th St.	2nd and 4th Wednesdays	226 W. 58th St.
Section No. 3	L. F. Luedicke			
Oneonta	B. B. St. John		3rd Thursday	
Rochester	Theo. Benz	278 State St.	Monthly	
Saratoga Springs	W. F. Camp	So. Glen Falls	2d and 4th Thursdays	Saratoga and Glens Falls
Schenectady	Mr. Spengler	McClellan St.	Subject to Call	
Syracuse	H. N. Smith	P. O. Box 809		
Tottenville	W. Taylor	Tottenville, S. I.	1st and 3rd Thursdays	St. George, S. I.
Troy	H. W. Boudey	First Street	1st Tuesday	Gas Office
Utica	W. C. Balda	228 Genesee Street	1st Tuesday	Elk's Club
Yonkers	Mr. Mayer	Manor House Sq.	Monthly	
NORTH CAROLINA				
Charlotte	F. E. Robinson	205 N. Tryon St.	Tuesdays	Members' Offices
OHIO				
Akron	Harvey Uhl	211 Water Street	Alternate Thursdays	2nd Nat. Bank Bldg.
Bellaire	J. Blumberg	Bellaire	Call of Secretary	Bellaire
Canton	H. S. Hastings	Industrial Corporation	1st Tuesdays	Industrial Com.
Cincinnati	W. R. Keefe	939 E. McMillan	Tuesday 3 p. m.	Chamber of Com.
Cleveland	Frank Monahan	1761 East 12th Street	1st and 3rd Thursdays	Hotel Statler
Columbus	A. G. Sims	Sims Elec. Co.	2nd Wednesdays	Bldrs. Exchange
Dayton	Clarence Carey	1107 Bron Ave.	2d & 4th Mondays	Builders' Exchange
Masillon	F. D. Mussop	309 E. Main St.	Weekly	Members' Offices
Springfield	M. H. Gray		On Call	Various
Steubenville	D. C. Hartford		1st Wednesday	Nat. Exchange Bank
Toledo	J. Kelly	16 Huron Bldg.	Every Wednesday 8 p. m.	16 Huron Building
Youngstown	F. F. McBride	Builders' Exchange	Monday Noon	Y. M. C. A.
OKLAHOMA				
Tulsa	C. W. Cowan	Masonic Bldg.	Every Monday	Masonic Bldg.
OREGON				
Medford	S. C. Clark	Cal. Ore. & Power Co.	3rd Monday	
PENNSYLVANIA				
Allentown	(See Bethlehem)			
Bethlehem	A. W. Hill	500 Main Street	Last Thursday	At call of President
Catasauqua	(See Bethlehem)			
Chester	Wm. J. MacMillan	12 W. 3d St.	2nd Thursdays	Chester Club
Dubois	C. E. Blakeslee		Monthly	
Easton	(See Bethlehem)		Monthly	
Erie	Earl Stokes	Builders' Exchange		Builders' Exchange
Lancaster	A. Deen	434 S. Sheppen	3rd Friday	Underwriters Office
Philadelphia	M. G. Sellers	1518 Sansom St.	2nd Thursday	1716 Arch St.
Pittsburgh	Fred Rebels	4th Avenue	1st Thursday	4th Avenue
Scranton	A. J. Fowler	Board of Trade Bldg.	Tuesdays	Zenke's
St. Marys	C. E. Blakeslee	Dubois	Monday	
Wilkes-Barre	Ambrose Saricks	Penn. Pr. & Lt. Co.	Tuesday Evenings	Penn. Pr. and Lt. Co.
York	A. E. Harris	E. King Street	2d & 4th Tuesdays	
RHODE ISLAND				
Providence	Herbert C. Hill	35 Westminster Street	1st Thursdays	
SOUTH CAROLINA				
Charleston	J. P. Connolly	Cons. Ry. & Light'g Co.		
Columbia	E. L. Cashion	Sumter, S. C.		
Greenville	E. C. DeBruhl	Ideal Electric	Wednesday	Manhattan Cafe
TENNESSEE				
Chattanooga	Carl Schneider	412 Kirby Avenue	Noons	Railway Light Co.
Knoxville	H. M. Moses	615 Market Street	Monthly	
Memphis	J. J. Brennan	Memphis Pow'r & Lt. Co.	1st Thursdays	Tribune Hotel
Nashville	J. Shannon	8 Ave. and Church		
TEXAS				
Dallas	Miss B. E. Burkhart	Deer Building	On Call	Deer Building
El Paso	R. S. Murray	1515 No. Campbell	Ev. Tuesday	303 Martin Building
UTAH				
Salt Lake City	E. H. Eardley	Box 544	Tuesdays	Chamber of Commerce
VIRGINIA				
Lynchburg	Irby Hudson	Hudson-Morgan Elec. Co.	1st Thursdays	Piedmont Club
Norfolk	K. D. Briggs	Arcade Building	Wednesdays	Chamber of Commerce
Richmond	W. A. Cutlett	Jefferson and Grace Sts.		
WASHINGTON				
Seattle	Rush McCarger	3rd and Madison St.	Thursdays	Elk's Club
WISCONSIN				
Green Bay	John B. Tingley	223 Cherry St.	1st Thursday	Nicolet Building
Madison	Otto Harloff	602 State St.	Wednesdays	Asso. of Com.
Milwaukee	Walter F. Baumann	156 5th Street	1st Monday each-Month	456 Broadway
Racine	F. H. Patrick	1545 W. Boulevard	1st Tuesday	Racine Building
CANADA				
Calgary	E. W. Beard	The Gringer Co.	Bi-weekly	Christie Elec. Co.
Guelph	W. E. Lemon	c/o N. Electric Co.	2d and 4th Monday	
Hamilton	K. J. Donoghue	c/o Doerr El. Co.		
Kitchener	O. S. Leyes	65 McGill College Ave.		
Montreal	G. C. L. Brassart	128 Osgoode St.	Monday 8:00 p. m.	Elec. Inspection Office
Ottawa	A. C. McDonald	Electric Shop	1st and 3rd Wednesday	Chamber Commerce
St. Catherine	A. J. Desand	24 Adelaide St.	2nd Tuesday	Board of Trade
Toronto	J. A. McKay	247 Granville St.	Every Tuesday	314 Pacific Building
Vancouver	J. F. Hutchinson	609 Moy Ave.		
Windsor	A. H. Cook	General Elec. Co.	2d and 4th Thursdays	Notre Dame Building
Winnipeg	R. N. Elgar	609 Moy Ave., W.		
Niagara Peninsular	W. H. Mackenzie			

Fraud Warning

Deposits Requested Against Plans and Specifications

Following our "Please Note" caution on page 52 of the March issue of THE ELECTRAGIST a good Milwaukee member comes through with an honest confession regarding instances of three architects—and he names them—in two distant cities who got small sums of \$15 and \$25 out of him as deposits on plans and specifications. One has since made restitution through the member's attorney.

Likewise, a so-called construction company in New York City has been similarly complained of by two members, one in West Virginia and one in Maine.

While not all such cases are swindles, it behooves every electragist to be on his guard and analyze each request.

Will not other members step up with past experiences that can be cited for the common good? Your names will not be disclosed except in cases where it will be to your interest and then only by your permission.

Looking for Standards

The chairman of the Standardization Committee of the Association of Electragists, L. G. Ross of Superior, Wisconsin, is seeking information on two different subjects for the use of his committee. He recently sent out a questionnaire to the membership, of which the following is a copy of the questions:

On the Standardizing of Knockouts on Outlet Boxes

Should knockouts in back of outlet boxes be of the same size as those in the sides?

Should all knockouts in back of box be $\frac{1}{2}$ inch regardless of size of knockouts?

Should the center knockout in back of box always be $\frac{1}{2}$ inch and the others the same size as knockouts in the sides?

If not one of the above combinations, what do you consider the best or most practical.

On the Elimination of Black Conduit and Fittings

Is there any reason for using black conduit in preference to white, other than price?

Do you carry a stock of both black and white?

Would you prefer to use one kind only?

Editors Change Positions

Transfers in Electrical Press Affect Official Magazine

There has been an unusual amount of activity among editors of the electrical press during the past few weeks. Farquson Johnson, who has been the editor of THE ELECTRAGIST since 1919, has resigned to take effect with this issue. S. B. Williams, who has edited the *Electrical Record* for the past two years, succeeds Mr. Johnson. Stanley A. Dennis, late editor of *Electrical Retailing*, takes the editorial chair vacated by Mr. Williams, and Roland Cole has succeeded Mr. Dennis.



S. B. Williams

For more than two years Mr. Johnson was secretary-treasurer of the Association of Electragists, in addition to serving as editor of the official magazine. For several years previous to his connection with the electrical press, he was engaged in newspaper promotion work, and it is his intention to return to that field of endeavor.

Mr. Williams was formerly connected with the *Electrical World*, having become associated with that publication after graduating from Princeton as an electrical engineer about ten years ago. He served *The World* as statistical editor, commercial editor, and news editor, and was assistant managing editor when he resigned. After serving as managing editor of *The Record* for some time, he succeeded Frank E. Watts as editor of that publication last November. The long and varied experience of Mr. Williams with the electrical press will enable him to ably

serve the Association in the publication of its official magazine.

Up to two years ago Mr. Dennis was associate editor of *Electrical Merchandising*. He resigned that position to become editor of *Electrical Retailing* in Chicago, and his many friends in the east now welcome his return to New York City.

For Advertising Purposes

The Association of Electragists recently had a design made which combines the advertising emblem with the organization title. This design which is reproduced herewith, is for the use of members only, and readily identifies the user with the Association.



Such a design is particularly adaptable for use on letter heads, bill heads and other office stationery. Electrotypes of this design have been made and will be supplied to members at fifty cents each. Address the headquarters office.

North Carolina Meeting

Colonel Townsend of Washington Delivered Principal Address

An interesting meeting of the newly formed state association of North Carolina was held at Greensboro on Saturday, April 5. N. L. Walker, state chairman, of Raleigh, presided.

About seventy-five contractor-dealers, with representatives of other electrical interests, were in attendance. The North Carolina Public Service Company gave a barbecue to the members and guests during the afternoon, which was very enjoyable and afforded an opportunity for everybody to get acquainted.

Col. L. T. Townsend, vice president of the National Electrical Supply Company of Washington, D. C., was the principal speaker. In reviewing conditions as they exist in the industry, Col. Townsend deplored the practice of taking work at less than cost. He continued:

"Low prices for material and for work have been the ruination of several in this city, and many in other cities. The old, worn out saying, so familiar to the old timers, runs something like this: 'I will do up this and that con-

cern, and soon I will be alone in the field to reap the benefit of my shrewdness.' This makes the old timer smile, for he knows that he has helped bury more than one. The method adopted by the new comer to him seems new. It is—as he reasons with himself—'I am new on the ground, and to get business and a little reputation, I will cut the prices; do the job at cost.'

"What does the old timer do when he sees trade drifting away? He cuts also—only a little more. The student has his war clothes on and he proposes to show that he is no chump and he goes one better. Down the ladder you go and the fight goes merrily on. What is gained? Nothing—the prices are down and probably can never be brought back. What is the next step? Some one gets tired, is running behind with his credit, and a bold stab is made. Call on the stockholders, fire the worn out partner, or shut up shop. And the band still plays on.

"I take it that this organization has for its principal object the cultivation of a mutual relationship, and at the same time the providing of a means of contact with each other. If this be your purpose, then I see not only opportunity for great accomplishment to all parties at interest, but a powerful medium for moulding trade conditions in this state and stabilizing the industry as a whole.

"Your first duty is to establish confidence in each other; your second, to transform this confidence into action. This can be done by freely discussing trade problems through the medium of this and similar meetings, arriving at conclusions and determining means of making them effective. The spirit of coöperation will be your guide to success.

"The jobbing salesman of today should be trained as a service representative to aid the contractor-dealer in selling methods, and to encourage engineers, mill superintendents and consumers to purchase supplies through the channels of electrical distribution in their local cities; but how many of the salesmen of today carry out this method.

N. E. Cannady, electrical inspector for the state of North Carolina, made an interesting talk on the subject of inspection, and others talked on technical subjects of interest to contractor-dealers.

At the executive session it was moved and carried, after discussion, that in

order to give every licensed contractor and dealer in the state an opportunity to come into the State Association, for the present there would be a separate organization, with recommendation that each member also join the International. Fourteen of those present joined the Association. The name selected was "Licensed Electrical Contractor-Dealers of North Carolina."

The next meeting is to be held in Raleigh, N. C., on Tuesday, July 2.

Toronto Service League

The Electric Service League of Toronto, Canada, now has seventy contractor-dealer members. This very favorable showing puts the seal of approval on the effectiveness of League work. If the plans of the League were not practical and well directed, no such large and responsible membership would have been obtained. The contractor-dealers of Toronto are more closely in touch with the actual effects of League work, and can see more clearly what is being done, it is said, than any other group. The membership campaign was conducted in the slackest period of the year—February and early March—and at a time when license fees and many other special payments had to be made. No personal canvass was made, and no other direct pressure was exerted on prospects. The League relied on invitations only. The many complimentary references by contractors, regarding League plans, indicate how these stand the test.

Since the list of members for the first half of the year closed on March 15, a thousand cards naming them as "Red Seal" contractors have been sent out. Builders and architects received them, as well as manufacturers and others interested in the League.

Letter size sheets bearing the list of "Red Seal" contractors are being sent out in all League letters to construction interests, keeping the names of contractor members constantly in view.

Some contractors have reported direct results from this special advertising. Many non members have stated their intention of joining. New cards with a revised list will be out in July, and a second edition of the booklet "What Every House Should Contain Electrically" will be printed with a revised list. The League should have one hundred contractor members on the new list.

The Toronto Hydro Electric System is giving valuable help to the League by advertising the Red Seal in its newspaper space. The advertising directs the attention of builders and architects to the Red Seal, advising the public to look for it when buying houses. Coming with the authority of the Hydro Electric System, this endorsement of the League's Red Seal is having a powerful effect on builders. Some builders are demanding of their wiremen that they be "Red Seal" contractors.

The League is obtaining data regarding the actual increase of value in Red Seal wiring installations. This specific information, based on Red Seal houses, has been asked for by electrical trade papers on account of the wide interest taken in the Red Seal.

An essential part of the old home rewiring campaign was the furnishing of a list of contractor members of the League. This list could not be completed until the middle of March, and therefore delay was inevitable. This campaign is being put on a month by month basis. Two methods are being used. One is to get the names of good prospects by checking over the newspaper advertisements of houses for sale. The other is to take older streets en bloc. The developing of business in this direction will involve the coöperation of the contractor-dealer, and as it is profitable business, where the element of cut price does not enter in very largely, the contractor-dealers should get behind it strongly.

Local Code Work

The Chairman of the Code Committee of the Association of Electragists is A. Penn Denton of Kansas City. Mr. Denton is a member of the electrical committee of the National Fire Protection Association, the body that compiles the National Electrical Code.

Some time ago Mr. Denton issued a bulletin and a questionnaire to the A. E. I. membership in an endeavor to establish local Code Committees throughout the United States and Canada. The total number of replies which he received was 345. These came from 221 cities in the United States and 11 cities in Canada.

Mr. Denton reports that 144 cities have conduit ordinances. He now has 28 local committees organized to work on the Code, with others organizing, and he urges members to lose no time in reporting to him on Code matters.

Lighting Men to Meet

Atlantic City is the place chosen for the mid summer convention of the National Council of Lighting Fixture Manufacturers and the time is June 25, 26 and 27. A large attendance was promised at the winter meeting in Chicago at which time the details of this gathering were worked out.

Many important questions of vital interest to each member of the Council, as well as to all the other manufacturers of lighting equipment, will come before the meeting for consideration. It is thought that one day can very profitably be given over to the subject "The Development of New Markets and New Products."

Another subject will be the "Protection of Designs". It is expected that speakers who have had experience in conducting patent pools and a knowledge of trade association joint patent protection will be selected for this session. Although it is not definitely decided, it is believed that the final day of the convention will be given over mostly to the annual business of the association and the election of officers.

Entertainment plans are receiving careful consideration by the committee in charge. Herman Plaut, president, has advised that he will give as a prize a golf bag fitted with a set of golf clubs, to be presented to the winner of the golf tournament for all comers, or in other words, the industry at large. The Biddle Cup is again to be played for, competition being limited to the membership. A banquet and dinner dance are being planned for the final evening.

Rocky Mountain Doings

The Rocky Mountain Electrical Co-operative League announces the appointment of C. L. Collins as field secretary. He will have charge of the headquarters office and in addition to specialized work will carry on various phases of the League work under the direction of the board of trustees.

Mr. Collins, who was formerly office manager and editor of the Motor Mercantile Company of Salt Lake City, in his new position expects to devote considerable time and attention to assisting contractor-dealers in establishing proper bookkeeping methods and otherwise helping them in their businesses.

This league, which has its headquarters in Salt Lake City, has a number of successful accomplishments to its

credit since organizing about two years ago. At present plans are being made for an attractive electric home. E. H. Eardley, who was formerly an executive committeeman of the Association of Electragists, is chairman in charge of the home management. G. R. Randall will have charge of the Electric League's portion of the mechanical and electrical work, as well as the supervising and directing of the installations connected with the exhibits. E. A. Evans will have under his supervision the exhibits which are separate and apart from the home, and L. B. Johnson will direct the publicity.

Passing of Walter Neumuller

The electrical industry in and around New York City received a shock when it learned of the sudden death of Walter Neumuller on the morning of April 9.

Mr. Neumuller had been ill with pneumonia but a few days. He lived in Port Chester, New York, and is survived by his wife and two sons. He was thirty-eight years of age.

Walter Neumuller went to work as an office boy for the New York Edison Company at the age of fourteen years. He advanced until he became secretary of that company, which office he held at the time of his death. He was a member of the board of governors of the Electrical Board of Trade; treasurer of the National Electric Light Association; and first past president of the New York Electrical League.

Mr. Neumuller was very active in organization work and his loss will be deeply felt by these interests. He was beloved by his business associates and by all with whom he came in contact. His many friends will sincerely mourn his untimely passing.

Weekly Luncheons

The St. Louis Electrical Board of Trade holds weekly luncheons at which addresses are made by prominent speakers on subjects of interest to all electrical people. According to Secretary John A. Laird the meetings are well attended.

Recently Dempster O. Murphy, director of advertising and publicity of the Middle West Utilities Company of Chicago, spoke on "Public Utility Advertising". The week before E. S. Lee, engineer, General Electric Company Research Laboratories, discussed "Some of the Big Problems of Electrical

Manufacturers", and previous to that M. H. Aylesworth of the N. E. L. A., brought a message entitled, "Electrifying America".

Reduces Rates

The Philadelphia Electric Company announces a substantial reduction in rates to its customers becoming effective as of May 1. This reduction is the third in three successive years and establishes a record in this country for a voluntary sharing by a public utility company of its prosperity with the community it serves.

Practically all types of service will be benefitted by the present reduction. Residential customers will find a substantial rate decrease in the use of electricity for cooking, labor saving and heating devices, the rate dropping from five to three cents per kilowatt hour for all electricity used in excess of one hundred and eighty kilowatt hours during a three months' period.

Walter H. Johnson, senior vice president, says that customers under the new rates will save this year over three and a half million dollars, and that as a result of the three successive yearly reductions the community will have saved at the end of 1924 more than seven million dollars.

The maximum load demand on the system last year was three hundred thousand kilowatt, and sixty-four thousand new customers were added. In order to meet even a greater load demand, and to care for many thousand additional customers, this year the company plans a construction budget greater by one third than for 1923. It is asserted that three hundred thousand dollars is being spent this year to improve the lighting on main thoroughfares in the territory the company serves.

N. F. P. A. to Meet

As announced in the last number, the annual meeting of the National Fire Protection Association is set for the 13th, 14th and 15th of this month at Atlantic City. This is the twenty-eighth annual convention and is to be held in the Hotel Chalfonte-Haddon Hall. Plans are under way for special train service from principal points with reduced fares on round trip tickets. The headquarters office announces that the official program will be mailed to all members ten days in advance of the meeting.

Monthly Luncheons

On March 27 the Rhode Island Electrical League held the first of a series of monthly noonday luncheons to be carried out at Woonsocket, R. I. On April 8 the first luncheon was held at Pawtucket, R. I.

These luncheons are being held for the purpose of bringing the League closer to the members. At these luncheons the secretary, Harry E. Dawson, tells of the work the organization is now doing and explains the plans for the future. Suggestions in regard to what should be done are also encouraged.

It is planned to continue these luncheons each month in both Woonsocket and Pawtucket and perhaps extend the idea to other places in Rhode Island. Already very good results have been secured from this scheme of getting together once a month and talking things over. Perhaps a similar plan will work out as profitably for your community. Why not try it?

A rapid increase in membership is being made by the Rhode Island body and every effort is being put forth to increase the interest of the new members. There has been an increase of nineteen members since the annual meeting February 29. This is an increase of twenty-five percent and new members are being secured all the time.

Annual Credit Convention

The twenty-sixth annual convention of the National Electrical Credit Association is to be held May 22 and 23 at Chicago in the Congress Hotel. An interesting program has been planned and delegates are expected to attend from all parts of the country.

Philadelphia Conference

At the monthly meeting of the Electrical Conference of Philadelphia held on March 20 at the Lu Lu Temple, Robert L. Nesbitt, assistant chief of the city electrical department, gave an interesting talk on the changes which have been brought about in the 1923 National Electrical Code. He illustrated his remarks with slides showing some of the more important changes, such as grounding identified neutral fuses, etc. The subject was thoroughly discussed.

Other speakers were: W. C. L. Eglin, vice president and chief engineer of the Philadelphia Electric Company;

Frank E. Maize, chief of the electrical bureau, Department of Public Safety for the city, who presided; and Vice Chairman Eckstein, who called the meeting to order. Secretary Richard H. Silbert estimated that a thousand were in attendance.

Helping Local Work

As further evidence of the splendid coöperation of the jobbing interests with contractor-dealers, Charles Krech, an electragist of Milwaukee, Wisconsin, has forwarded to us a letter sent out by the Boggis-Johnson Electric Company of that city.

On the top of the letter is a short piece of rope and a single strand of the same attached with a small square of adhesive tape. The contractor-dealer is asked if he ever tried to break a rope—yet it is easy to break a single strand. Thus is proven that in union there is strength.

After explaining that the Electrical Contractor-Dealers Association of Milwaukee has installed a bureau of credit information for members, the letter proceeds: "Some eighty electrical contractor-dealers are now united in the association. If not already a member, you should join and secure for yourself the benefits of membership."

Mr. Krech says that the activities of the local jobbers are accomplishing good results and are greatly appreciated by the local contractor-dealer group.

Illustrated Talk

Members of the Denver electrical industry were afforded an exceptional opportunity recently to learn of the newest developments in motor control, automatic stopping and starting, and other phases of industrial control in an illustrated talk by W. C. Yates, manager of industrial control sales of the General Electric Company, with headquarters at Schenectady, N. Y.

The meeting was held under the auspices of the Electrical Coöperative League of Denver April 3 and the largest attendance was recorded of any western meeting addressed by Mr. Yates on his trip. His tour was made to acquaint officials of the General Electric Company in the various divisional offices of the latest developments by the G. E. organization in motor control equipment.

The Toast Campaign

The American Institute of Baking, in its official journal, announces the progress of the toast campaign, in which the electrical industry has coöperated through the advertising of electric toasters, as follows:

Over three thousand columns of newspaper space have been devoted to favorable news items, editorials, recipes, and special copy on the National Toast Campaign in the months of December to March.

Practically every issue of food and



With Its Background of Flower Designs This Booth of the Public Service Electric Co. of Colorado at a Recent Exposition in Denver Set Off the Sanitary Qualities of Electrical Appliances to Good Advantage

trade journal magazines carry some story or editorial. Magazines of especial interest to women and domestic science students are accepting articles by national authorities on wheat foods. The official publications of many national associations are advising their members to coöperate. Talks on toast, bread, baking, and consumption of wheat have been broadcast from coast to coast.

A program consisting of a series of talks for the use of radio on a national scale has been worked out. These will be distributed to selected speakers, for all the important stations, in coöperation with the electrical industry.

Denver Party

One of the largest family gatherings ever arranged for members of the electrical industry at Denver was staged under the auspices of the Electrical Coöperative League of that city on Friday, April 4.

The program, which was made possible by the generosity of several of the League member companies, was given over to singing, dancing, and demonstrations and motion pictures of an educational as well as entertaining nature. The headliner was the "Mountain States Telephone Follies" under the direction of the Mountain States Telephone & Telegraph Company. The films, "Show 'Em How" and the "Wizardry of Wireless" were provided by the Westinghouse Lamp Company and the General Electric Company. The other League member company participating in the program was the Public Service Company of Colorado.

No little credit was given Dean Clark, commercial manager of the telephone company at Denver, and League treasurer and members of the League entertainment committee, headed by J. C. Davidson, on account of the success of the gathering.

The closing of the program was marked by the presentation of corsage bouquets to the seventeen girls participating in the program. The presentation talk was made by John J. Cooper, former chairman of the League.

Electrical Apartments

The new Westbrook Apartments in Buffalo, which will be ready for occupancy about July first, will be one of the most completely electrically equipped apartment buildings in the United States. In each living room there will

be five and in every other room from three to four base plugs. Of particular interest is the full electrical kitchen equipment consisting of individual Frigidaires and full automatic, all white enameled Westinghouse electric ranges. Ninety-three of these kitchen installations are being made, one in each of the apartments in the building.

The new apartments, which are located on the corner of Delaware Avenue and North Street, are ten stories high and contain 93 apartments of from three to eight rooms each. The cost of the building runs over a million and a half dollars. No effort has been spared in providing every convenience and comfort. There will be a restaurant, which will also be open to the public, a florist's shop, a ladies' hair dressing parlor and a barber shop. A private dining room will be provided for special banquets and dinners. Heat, light, telephone, and maid service will be furnished all tenants.

Convention Dates

A catalog of convention dates supplied by the Society for Electrical Development for the months of May and June is as follows:

May

- 2—Vacuum Cleaner Mfrs. Assn., New York City.
- 5—New England Division, N. E. L. A. Merchandising Bureau, Boston, Mass.
- 5-5—Wyoming Utility Association, Cheyenne, Wyoming. (Annual Convention) also Joint Quarterly Session—Rocky Mt. Div. N. E. L. A. & Committee of Public Utility Information.
- 6-6—Indiana Gas Association, West Baden Springs Hotel, West Baden, Ind.
- 8-9—Nebraska Section—N. E. L. A., Omaha, Nebraska. (Annual Convention).
- 12-13—Florida Engineering Society, Orlando, Florida.
- 13-15—National Fire Protection Association, Chalfonte-Haddon Hall Hotels, Atlantic City, N. J. (Annual Meeting).
- 19-23—National Electric Light Association, Atlantic City, N. J. (Annual Convention). M. H. Aylesworth, 29 West 39th St., New York City.
- 22-23—National Electrical Credit Association, Congress Hotel, Chicago, Ill.
- 26-29—American Society Mechanical Engineers, Cleveland, Ohio. (Spring Meeting).
- 26-29—The Electric Power Club, Sea View Golf Club, Absecon, New Jersey.
- 26-29—Westinghouse Agent Jobbers Association, The Homestead, Hot Springs, Va. (Annual Meeting).

June

- Wyoming Utilities Association, Casper, Wyoming.
- Iowa Section, N. E. L. A.
- 2-3—Electrical Supply Jobbers Association, Homestead Hotel, Hot Springs, Va. (Meeting of Exec. Committee & Merchandise Committee).
- 4-6—Electrical Supply Jobbers Association, Hot Springs, Va. (General Meetings of all Divisions).

10-12—National District Heating Association, Commodore Hotel, New York City.

11-13—American Association of Engineers, San Francisco, California.

11-13—North Central Electric Division, N. E. L. A., Winona, Minnesota.

Between June 11th and June 18th—Association of Railway Electrical Engineers, Atlantic City, N. J.

12th—American Engineering Standards Committee, New York, N. Y.

16th—Associated Mfrs. of Electrical Supplies, Hotel Ambassador, Atlantic City, N. J. Frederic Nicholas, Genl. Secy., 30 East 42nd St., New York, N. Y. (Annual Meeting).

23-27—American Institute of Electrical Engineers, Edgewater Beach, Chicago, Ill. (Annual Convention).

23-27—American Society for Testing Materials, Chalfonte-Haddon Hall Hotels, Atlantic City, N. J. (Annual Meeting).

25-27—National Council Lighting Fixture Manufacturers, Atlantic City, N. J.

25-28—Society for the Promotion of Engineering Education, University of Colorado, Boulder, Colo.

26-28—Association of Municipal Electrical Utilities of Ontario, Niagara Falls, Ontario, Canada.

Radio Preaching

"Splendid sermon Dr. Soandso preached this morning, wasn't it?" "Why, my dear, I didn't see you there." "No, I was in bed till noon, but I listened in on my radio."

And so Dr. Shannon, holding services in the Auditorium at Chicago, who broadcasts his sermons, was led to make these comments from his pulpit recently: "A nightgown is not a fit garment in which to listen to the word of our Lord, and I hope that all of my congregation will get up and dress for my services rather than to hear them in their nightgowns and pajamas."

Perhaps the good doctor had in mind the contribution box when he further suggested that a future Sunday be designated as "Dollar Sunday", so that his invisible audience might have an opportunity of contributing to the support of the service which they hear but do not see.



She gave him positive instructions to take all the rugs out in the yard for a good beating. Fifty-five minutes later she came downstairs and—Oh Boy! This is what she found

Constructive Advertising

Newspaper advertising far superior to the average run of electrical copy has been carried on in New York City newspapers recently by the United Electric Light and Power Company of that city.

One advertisement in particular was not only attractive, but most convincing. The space was three columns wide and about ten inches deep. The caption was "Electric Outlets", accompanied by a line cut of an outlet with a hand reaching up to insert a plug, followed with "Make your convenience outlets more convenient." Electragists would be particularly pleased with the main paragraph of the advertisement, which read:

"Let an experienced electragist advise you; not only with respect to the selection of places where Electric Outlets are immediately required, but where they should be installed for your future electrical needs, as well. You will not only be better satisfied knowing that your Electric Outlet requirements are adequate, but you will profit in not having to make costly alterations and additions later on!"

Marginal illustrations showed the various electrical appliances in operation in a manner that impresses the reader with the many comforts and conveniences offered.

Elected Vice President

R. A. Goeller recently was elected second vice president in charge of construction of Hatzel & Buehler, Inc., electragists of New York City. Mr. Goeller has been with this company since its incorporation in the capacity of general superintendent.

Worthy Praise

Certain men stand out as electragists in the same way that individuals in other professions stand out who have set a worthy goal and are ever striving to attain it. Louis D. Rubin of Charleston, South Carolina, has perhaps made as great a success as an electragist as anybody in the country. These columns have repeatedly told of his achievements.

His most recent attainment is his selection by one of the leading newspapers of the city for a writeup in its "Men of Affairs" column. His engaging likeness was set forth in a pen and ink sketch, and some of the things said of him were as follows:

Louis D. Rubin is one of Charleston's youngest prominent business men. He is the progressive head of the Louis D. Rubin Electrical Company, a business which he started just after the beginning of the World War in 1914. When the United States entered the conflict, Mr. Rubin served in the marine corps.

His store has been nationally advertised in all the leading electrical magazines. Mr. Rubin has won first prizes in several national contests for window displays, a Ford touring car, a handsome phonograph, and a radio set worth \$725 being among the awards.

Mr. Rubin is prominently identified with the Chamber of Commerce, the Rotary Club, the Electrical Contractors and Dealers Association. He was a leading spirit in the recent electrical show and was prominent in the better homes demonstration.

Beginning with space in a hardware store, Mr. Rubin has upbuilt a prosperous and progressive business and his concern has handled some of the biggest contracts in Charleston. He is a Charlestonian who believes in Charleston and is always willing to render his share of service to the city.

Rost Buys Another

O. Fred Rost, the well known head of the Newark Electrical Supply Company and of "Keep New Jersey Dollars in New Jersey" fame, has made another ten strike since it was announced in the March issue that he had purchased the Hudson Electrical Supply & Equipment Company of Jersey City.

Sometime in February he was invited to interest himself in the affairs of another jobbing house located in the extreme southern part of his fair state, and early in March he announced that he had become president and general manager of the Trenton Electric Supply Company.

As quickly as possible, he advises, the business of the Trenton company will be reorganized so as to create the healthiest condition, by which its merchandise investment, and volume of purchases and sales will be in balance with its financial capacity. He says this company will handle only the highest quality merchandise and will pursue in every department a policy that is representative of highest standards in business ethics and practice.

With the acquisition of the Trenton Electric Supply Company, Mr. Rost feels that he has fulfilled a desire of long standing. With the Newark Elec-

trical Supply Company in the heart of the New Jersey territory, the Hudson Electrical Supply & Equipment Company ready to serve the Hudson River territory, and the Trenton Electric Supply Company looking after the south territory of the state, he believes the combined services of these three concerns should do much in an electrical way to "Keep New Jersey Dollars in New Jersey."

Compare 1913 with 1923

An illustrated circular recently issued by the A. A. Wire Company's sales offices, New York City, pictures the increased prices of materials entering into building construction since 1913. Taking one hundred percent as a basis ten years ago, steel, lumber, glass, hardware, brick, and other materials have advanced all the way from sixty-seven to more than a hundred percent.

Against these increases the illustration shows that wire and cable have decreased eighteen percent. The suggestion is put forth that those who contemplate building should contract for the electrical installations without further delay.

Fire Waste Contest

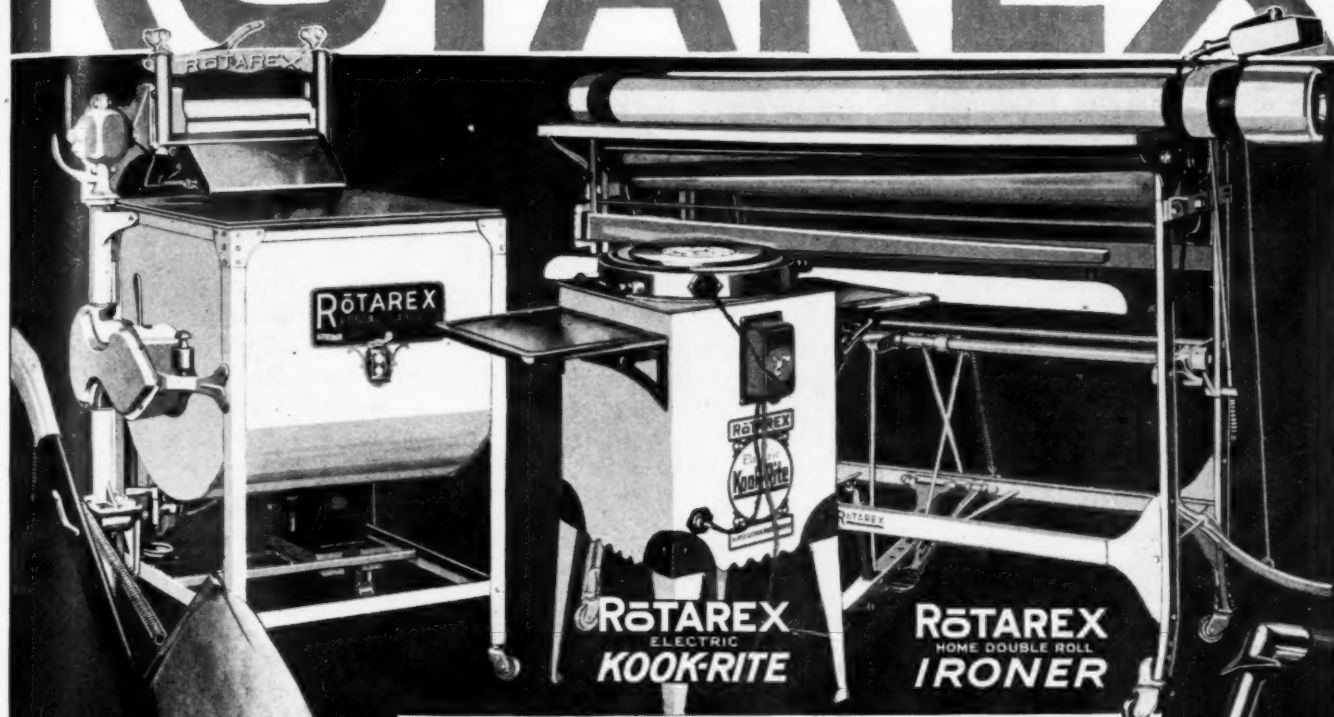
The award to the Chamber of Commerce of Hoboken, New Jersey, of the grand prize in the interchamber fire waste contest, conducted by the National Fire Waste Council, was announced last month by the Chamber of Commerce of the United States.

The first prize for cities of the first class, over 100,000, was awarded to Indianapolis. For cities of the second class the prize went to Hoboken; for cities of the third class, to Dubuque, Iowa, and for cities of the fourth class, to Blytheville, Arkansas.

The award is based on fire losses and fire prevention measures. Hoboken showed a reduction in fire loss of 67 percent for 1923 in comparison with the average for the preceding five years, or a reduction from \$449,224 to \$157,041.

For all the cities entered in the contest and submitting reports the fire loss of 1923 was \$3.24 compared with \$4.75 for the whole country in 1922. As a result of the efforts made by the sixteen honor cities a reduction of 13½ percent in per capita loss, compared with the preceding five year average, and a decrease of 34 percent in the number of persons killed and injured

ROTAREX



Don't Wait Another Day!

The recent addition to our line of the wonderful new ROTAREX Electric Vacuum Cleaner and the equally remarkable new ROTAREX Electric Kook-Rite threatens to overtax our production facilities very soon. Make sure of prompt deliveries when you want them by getting your commitments in NOW.

Why attempt to compete against these *All-Stars* with a "scrub" team? Compare the advantages the Apex-Rotarex dealer has over you.

Bigger Discounts
"Overhead" Economies
Better Service

Practical Merchandising Plans
Greater Values
Quicker Deliveries

One of our 27 Factory Service Stations is located in your immediate vicinity. Write for our attractive proposition.

Address Department 1081



Apex
ELECTRIC SUCTION
CLEANER

ROTAREX
ELECTRIC VACUUM
CLEANER

The Apex Electrical Manufacturing Co.

1067 East 152nd Street

CLEVELAND, OHIO

FACTORIES AT CLEVELAND, O., AND TORONTO, ONT.

ELECTRAGISTS USE THE PRODUCTS OF ADVERTISERS IN THE ELECTRAGIST

were accomplished. Two hundred and two chambers of commerce in forty-three states are entered in the national contest.

Electrical Courses

Of interest are the various electrical courses that will be given this year at the summer session of the Carnegie Institute of Technology in Pittsburgh. According to the announcement, the College of Industries will give six weeks' courses from June 30 to August 8 in elementary electric wiring, advanced electric wiring, elementary principles of electricity, advanced electricity and elementary principles of radio communication. The radio course is to be given as the result of the success of a similar course given during the preceding summer.

Educational Movement

An educational movement, designed to give the public the benefit of the highest scientific and engineering achievements, is assured as a result of formal action by the national executive committee and the executive committee of the Public Relations Section of the National Electric Light Association at its meeting in Chicago, March 14.

While all the details of the plan will not be announced until the convention of the National Electric Light Association in Atlantic City this month, the movement is sponsored not merely by the National Electric Light Association, but by all the leading organizations contacting with the public in the electrical field. A special committee has been formed, representing the various organizations and groups in the electrical field, and the formal announcement will be made in the name of this committee, which is to be known as the Lighting Educational Committee.

The entire activity is to be non commercial, the movement having grown out of the desire of foremost men in the industry to give the public a better understanding of the correct principles of lighting.

Government officials and educational authorities have frequently called attention to the lack of general knowledge as to what constitutes good illumination. Conservation of eyesight, through proper diffusion of light in the homes and schools of the nation, will be one of the features of the general educational movement. James E. Davidson

of Omaha, Nebraska, vice president of the National Electric Light Association, has been named as chairman of the Lighting Educational Committee, and will direct the entire activity.

Attractive Exhibit

The exhibit here shown was devised by the Electrical Extension Bureau of Detroit for use at the various educational shows during the season. All three panels of the exhibit are wired up



When Shown at Educational Shows This Exhibit Provides an Interesting Demonstration

with miniature electric lamps—flash-light bulbs—and the whole exhibit is operated from a push button switch-board mounted on a small table to one side or in front of the board. The demonstration accomplishes the same result as obtained in an actual electric home exhibit.

As an animated floor plan showing the application of lighting, wiring and appliances to the comforts of a home, the exhibit provides a very interesting demonstration. The visitor is met on the front porch and is conducted from one room to the other, throughout the entire house, stopping in each room long enough to have explained the purpose of the electric installation. Switches are indicated by red lamps, convenience outlets by green lamps, and light outlets by white lamps.

In the dining room for instance the audience is told of the center fixtures being controlled by a three way switch; that brackets are suggested for additional lighting, and that the modern dining room has a wired dining table.

When the number and placement of convenience outlets is discussed, a switch is thrown lighting up particular items on the side panels, such as will show appliances to be used in that particular room. Wherever it has been shown, this unique exhibit has had a large and interested audience.

Standardization Booklet

A booklet entitled "Standardization—What it is Doing for Industry" has just been issued by the American Engineering Standards Committee describing how standardization work is being carried on, first, in the individual plant, second, in industry as a whole, third, nationally on an interindustrial basis, and fourth, internationally. This book is free and may be procured by writing to the A. E. S. C. in New York City.

Shortcomings of Salesmen

That there is need for salesmen to acquire a better understanding and broader sympathy for purchasing agents is the opinion of L. F. Boffey, editor of *The Purchasing Agent*, a magazine for industrial buyers, who addressed about five hundred members and guests of the New York Electrical League at a luncheon in the Hotel Astor, March 26. "The old type of purchasing agent, who was merely a clerk or buffer and who deliberately antagonized salesmen, is gradually disappearing from industry and the modern buyer in manufacturing circles is of the executive type," said Mr. Boffey. "But many salesmen have overlooked or ignored the development of purchasing and purchasing agents in the past few years, and much of the old time antagonism between buyers and sellers unfortunately remains."

"The charge is frequently made that purchasing agents waste salesmen's time. To some extent the charge is justified, but a sincere effort on the part of purchasing agents is being made to eliminate the unsound condition. A duty devolves on the salesman to do his share by recognizing, when he enters the buyer's office, that other salesmen are to follow him and that his arguments should accordingly be restricted to essential business matters."

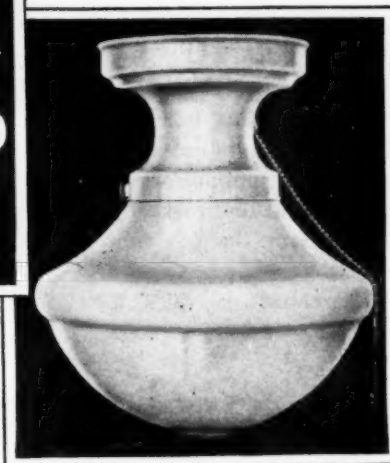
Among the specific shortcomings of salesmen which antagonize most purchasing agents are, in the belief of Mr. Boffey, the indiscriminate presentation of personal letters of introduction, the practice of seeking for the purchasing agent's "hobby", and the tendency to



No. 4040. For use where there is neither wall switch nor convenience outlet.



No. 3131. For use in a room having both wall switch and convenience outlet.



No. 3030. For use where there is a convenience outlet only.

Is Kitchen Lighting a fad or a permanent business?

The nationwide success of Kitchen Lighting campaigns is convincing evidence that here is a permanent business.

Accordingly Western Electric offers a line of units which is a step ahead in design and workmanship. Holders are of one piece steel, white porcelain enameled. They can be easily mounted in place with all screw attachments concealed. Globes are the standard cased glass.

This is the kind of merchandise that will add to your reputation as a reliable dealer. Count on it to get you your share of the desirable Kitchen Lighting business. Write for details to our nearest House, or to 100 East 42nd Street, New York City.

Western Electric Company

Offices in 47 Principal Cities

hold price concessions in reserve for "haggling" purposes.

"The one price salesman, who stands or falls on his original quotation is beloved by all purchasing agents," said the speaker. He declared that the salesman who considers that his responsibility extends beyond the securing of the order and continues until the right goods are in the customer's possession, is the one who gets the repeat orders when competition prevails.

Lighting Sales Pointers

Under this heading an article was published last month relating to foot candle standards of illumination advocated for the home and the workshop as the result of a survey on this subject made by the Society for Electrical Development. The standards given were as follows:

	Foot candles
Offices	2.5
Draughting rooms	5 to 10
Churches	1 to 2.5
Schoolrooms	3 to 4
Blackboards	3 to 6
Stores, according to color of wares	4 to 8
Machine shops	3 to 4
Dining tables	3
Drawing rooms	2
Library or study	4

Since this article appeared attention has been called by a number of leading illuminating engineers to the fact that the most modern standards of lighting intensities in buildings coming under the above categories are considerably higher than those indicated, and the following are set forth as being more nearly correct:

	Foot candles
Offices	6 to 10
Draughting rooms	10 to 20
Churches	3 to 6
School rooms	5 to 10
Blackboards	8 to 12
Stores, according to color of wares	5 to 12
Machine shops	8 to 16
Dining Tables	6 to 8
Drawing rooms	4 to 6
Library or study	5 to 8

Community Exhibits

Gratifying results marked the community electrical exhibit held by the Pittsfield Electric Company at Pittsfield, Massachusetts, the week of March 10 to 15. The attendance exceeded the expectations of the manager, E. P. Dittman. A booth of unusual interest consisted of an educational exhibit showing in skeleton form the three types of residence wiring. The Contact Committee, New England Section, National Electric Light Association and the Society for Electrical Development coop-

erated with the central station, the special portable exhibit equipment of the Society being used.

The Manchester Traction, Light and Power Company, Manchester, N. H., held a very successful community electrical exhibit in the Manchester Institute of Arts and Sciences during the week, March 31 to April 5. Over 20,000 people are reported to have attended. A feature of unusual interest was broadcasting by prominent local men from the exhibit hall. Special exhibit equipment was supplied by the Society for this show also.

Sales Manual on Irons

A ninety-six page well illustrated manual to help sell more irons and ironers, published by The Society for Electrical Development, is just off the press. This manual is replete with merchandising and advertising suggestions and will contain a section specially devoted to a local coöperative campaign.

Speaking of Fuses

At one of the regular weekly luncheons of the St. Louis Electrical Board of Trade, H. T. Bussmann, a manufacturer of that city talked on the subject of fuses. He made four points in connection with fusing that are particularly interesting, and which are summarized as follows:

1. "A feeling that good contact is not required for an electric fuse."

Every one running circuits will use the greatest care in making splices, soldering terminals and so forth, and expect a fuse to function properly with loose clips and badly fitted parts. Then when the fuse blows they say that the fuse maker didn't know his business.

2. "There is a feeling that electric fuses are inaccurate."

Instances were cited where fuses were blowing and the terminals were found to be corroded. After cleaning no further trouble was experienced. A motor driven textile machine was mentioned where the fuses were adjusted so closely as to blow before the thread breaks. A great number of tests by the Underwriters Laboratories of fuses made by reliable manufacturers on a ten percent overload which they are required to carry continuously, showed less than one percent failures and they were not practical failures, blowing at a very small percent over or under the required ten percent.

3. "A feeling that fuse cases can be overloaded indiscriminately."

When the fuse case is designed for a certain capacity, the amount of metal is reduced to the lowest safe point. When larger fuse links are inserted than those intended, there will be an explosion under a short circuit that may cause damage to life or property.

4. "A belief that fuses can be eliminated or very large fuses can be used."

Some people think that any old kind of a fuse will do. One case where a man cut a fuse link out of a piece of sheet lead. Pressures from 400 to 900 pounds per square inch are created when large fuses blow under short circuit conditions.

First Radio Exposition

Denver Interests Held Initial Feature of Rocky Mountain States

The first coöperative radio campaign and exposition to be organized anywhere in the Rock Mountain states was staged by Denver radio interests April 7, 8 and 9. Owing to the huge success of the enterprise, which had the wholehearted backing of a local newspaper, the Denver Post, it is now planned definitely to arrange another mammoth exposition in the Denver municipal auditorium in the fall. It is expected that the new \$175,000 broadcasting station which is being constructed in Denver by the General Electric Company will be in operation before that time.

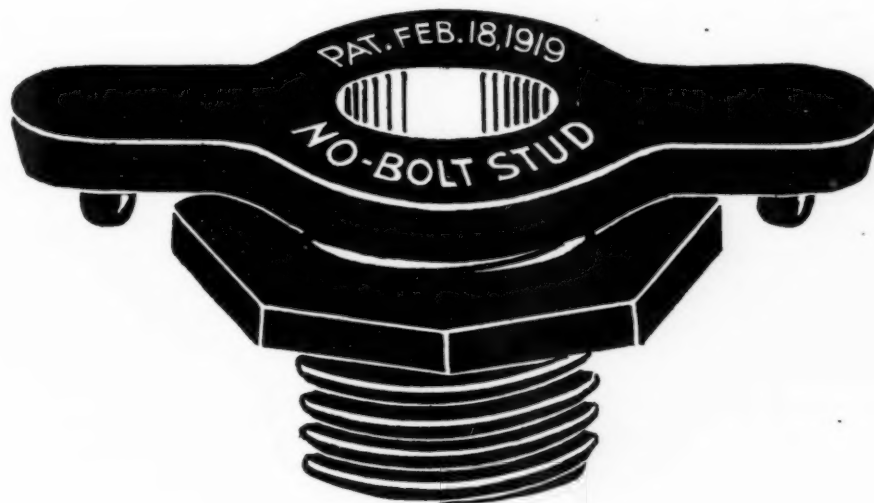
No estimate is obtainable of the hundreds of radio fans in Denver who saw the display, which was provided by twenty radio distributors, dealers and manufacturer representatives. Special display booths were built to house the equipment. A special broadcasting station studio was provided also as a further means of stimulating interest in radio activities.

The exposition was free to the public. Admission was gained by the presentation of special complimentary tickets which had been printed to boost the radio show. Special attention of the reading public to the exposition was demanded by a twelve page radio supplement appearing in the Denver Post, Sunday, April 6.

Official endorsement to the enterprise was given by the Electrical Coöperative League of Denver.

Following are the Denver firms who participated in the exposition: Hendrie & Bolthoff Manufacturing & Supply company; Reynolds Radio Company,

SPECIFY "KWIKON" FOR GOOD ROUGHING-IN MATERIALS



Save 83% of assembling time with Kwikon "No-Bolt" Fixture Studs

A prominent Cleveland contractor [name of contractor on request] on actual test, assembled 100 "No-Bolt" studs in outlet boxes in exactly $\frac{1}{3}$ the time required to assemble the same number of Hickey studs. This means a saving of 83% in assembling time.

But it means more too! When the locknut is clamped tight, Heaven and earth cannot loosen the stud. It becomes a rigid part of the box. There is no possibility of the stud coming loose or the fixture hanging crooked.

The weight of the fixture is borne by the broad supporting head of the stud bearing directly against the back of the box. No small bolts are used. There are no fine threads to strip, no small nuts to start, no small nuts to lose. One broad convenient locknut on the stud stem holds the stud in place.

More space is left for wires because only the stem of the stud extends into the box. This means a saving in wiring time and a better job.

*"No-Bolt" studs cost no more than Hickey studs
with their time-killing, unreliable nuts and bolts*

S. R. FRALICK & COMPANY
19 S. Clinton St. CHICAGO, ILL.



The Line of No Regrets

KWIKON "No-Bolt" Fixture Studs
KWIKON Locknuts and Bushings
KWIKON Box Connectors
KWIKON Fixture Studs
KWIKON Tile Hangers
KWIKON "Endoutlets"
KWIKON Conduit Nipples
KWIKON Grounding Clamps
KWIKON Conduit plugs
KWIKON Switch Boxes
KWIKON Outlet Boxes and Covers
KWIKON Conduit Straps
KWIKON Service Entrance Fittings
KWIKON Knife Switches
KWIKON Cutout Material
KWIKON Flush Receptacles
KWIKON Safety Switches
KWIKON Conduit Hanging Materials
KWIKON Conduit Clamps
HERSH DUPLEX SIGNALS

Get Your Free Sample

S. R. Fralick & Company
19 S. Clinton St., Chicago, Ill.

We want a free sample and prices of the "No-Bolt" stud. Also send us your catalog covering KWIKON Conduit Fittings and Wiring Devices of the better sort.

Name

Address

Inc., Rocky Mountain Radio corporation, Winner Radio corporation, Echo-phone Radio shop, Scott Brothers Electric company, Bergman-Dilley company, Premier Electric company, Cahn-Forster Electric company, French Battery & Carbon company, Mile High Photo company, Crosley Radio company, Maedel's Hardware company, A. & M. Radio Manufacturing company, W. L. Winner Radio shop, Denver Radio Service company, Ball Radio company, Knight-Campbell Music company, National Carbon company of Long Island, N. Y., Alden Napier Manufacturing company, Chicago, Ill., and the Crosley Radio company of Cincinnati, Ohio.

Specifications that Specify

During the past few months considerable interest has been aroused throughout the electrical industry on the subject of clarifying specifications—debunking them, as Charles L. Eidlitz expresses it. W. R. Herstein of the Wesco Electric Supply Company, Memphis, Tennessee, in last month's issue of the *Jobber's Salesman*, writes of the fallacy of the use of the words "or equal" in specifications, which was discussed in these columns last month.

Mr. Herstein says that there is so little difference between the cost of high grade wiring materials and those of inferior quality that architects should make it a point to safeguard their clients against the use of the latter by specifying only the best materials. Further, he says in part:

"The words 'or equal' have no place, therefore, in electrical specifications. Indeed, their use implies a lack of due care or of good faith, since few architects or contractors have the equipment necessary for making the tests necessary to ascertain whether the requirement 'or equal' has been met. The phrase, at best, can only give a strategic advantage in the event of a lawsuit, and even then would be of doubtful value in view of the well known contradictory character of expert testimony.

"A far surer method would be to state by name the different manufacturers whose products would be acceptable. On the important items of conduits and fittings, wires and cables, switch and panelboards, and schedule material, every electrical man knows the names of those manufacturers whose goods are recognized as standard. These names are not so numerous that they

cannot be set out in the body of the specifications without the additions of too much verbiage, and surely the interest of the builder is of sufficient importance to justify any extra work involved in the enumeration.

While it is quite likely that the names of all eligible manufacturers would never be mentioned in any one set of specifications, the number of names employed would doubtless always give the bidder ample opportunity to secure competitive prices, and the thousands of contracts let annually would insure a fair amount of mention to every enterprising and meritorious manufacturer.

"If electrical contractors are to realize a profit from their efforts they must make up their minds that work is not always to be done by being the lowest bidder, and that it is possible to educate the public along the lines of demanding superior materials and workmanship, and paying a reasonable price for it."

U. S. Commerce Chamber Meets

A distinguished company of speakers will discuss outstanding national and international economic problems at the forthcoming Annual Meeting of the Chamber of Commerce of the United States at Cleveland, May 6 to 8. The Association of Electragists is a member of this organization and has a standing committee which coöperates with its work.

The major topics to which the convention will give its attention are "Business and Agriculture," "European Readjustment," and "The Responsibility and Integrity of Business."

Among the speakers who will address general sessions of the convention are: Sir Esme Howard, British Ambassador; Secretary of Commerce Hoover; Secretary of the Navy Wilbur; Newton D. Baker, former Secretary of War; Frank O. Lowden, former governor of Illinois; Julius H. Barnes, president of the Chamber of Commerce of the United States; General Herbert M. Lord, Director of the Budget; Colonel George T. Buckingham, Chicago; Judge Edwin B. Parker, Umpire of the German-American Mixed Claims Commission; Dwight B. Heard, President of the National Livestock Association, Phoenix, Ariz.; and John W. O'Leary, vice president of the Chicago Trust Company.

Spelling Service

The electrical dealer should be sure that his store suggests *service* in every sense of the word—makes the customer feel at home—attracts new customers—holds them all. The electrical store should be

Suggestive of
Elegance and
Refinement and
Very hospitable
In treatment of
Customers that
Enter the store.

How about the sales people? Service should be their watchword, also. Their very appearance should *spell service*, and it will if they are

Sensible
Entertaining
Refined
Versatile
Intelligent
Courteous
Energetic.

New E M F Book

The third annual edition of the EMF Electrical Year Book has been issued by the Electrical Trade Publishing Co., Chicago. The book has been completely revised and materially added to. It now has a total of about 1550 pages, of which 1080 constitute the main text.

This is a useful general reference for the entire electrical industry, particularly in giving complete lists of manufacturers of almost every conceivable electrical product under more than 3200 classifications of equipment.

There are also definitions of over 5600 electrical words and terms, and some 600 encyclopedia topics on the different branches of the industry, the leading electrical activities, inventors and scientists, associations, educational institutions, periodicals, etc.

Several hundred illustrations have been added to the text, which is arranged alphabetically throughout for ease of reference.

New Motor Book

The McGraw Hill Book Company, Inc., 370 Seventh Avenue, New York City, has issued a new book entitled, "Principles of Electric Motors and Control." It is by Gordon Fox, who is a well known electrical engineer and an acknowledged authority on all the subjects he takes up in this volume, which is the first edition.



—and 5 big advantages

FIRST—A high quality line—no come-backs to you. The 5-year guarantee is from factory to user.

SECOND—The line is complete—has kept pace with fan developments for 30 years.

THIRD—A trade-winner—Emerson Jr.

—a nine-inch full quality fan at a popular price.

FOURTH—The oil-tight, dust-proof bearing—an exclusive feature of Emerson A. C. Fans.

FIFTH—Service—prompt shipment from stocks of 70 jobbers located at convenient points.

Carry the Emerson Line. These five advantages will quickly establish your store as the one best place in town for electric fans

The Emerson Electric Mfg. Co.

2018 Washington Avenue

50 Church Street
New York City

St. Louis, Mo.

Window displays, counter cards, blotters, envelope inserts, movie slides, banners, newspaper electros—send for portfolio describing all the free sales-helps you get with the Emerson line. Send also for name of your nearest Emerson Distributor.



It is pointed out that many existing texts dealing with electric motors and controllers treat this subject primarily from the design viewpoint, while a much larger class is interested in the application and operation of this equipment. The author's treatment of principles, performance, characteristics and practical construction of electric motors and controllers is of simple and practical character, the higher mathematics, vector diagrams and similar complications having been avoided.

The motors described are those in regular commercial use. Some of the subjects taken up are: motor action; direct current motors; speed control of direct current motors; armature reaction and other factors; polyphase induction motors; speed control of polyphase induction motors; polyphase synchronous motors; single phase motor construction features; protective features of controllers; principles of alternating current control; operation of motors in parallel and series; use of flywheels; motor braking.

The book contains five hundred pages and is profusely illustrated with drawings and actual photographs.

Revised Wiring Book

The fourth edition of "Wiring for Light and Power" by Terrell Croft has just come off the press and is recommended to electragists and electrical contractor-dealers whose aim is to keep abreast of the times in their installation work and give the customer the benefit of latest approved methods and systems.

This edition is warranted largely by reason of the changes which have become effective in the new 1923 National Electrical Code, around which the text has been written and to which it conforms.

"Almost any one can install electrical wiring and apparatus so that they will work in some fashion or other," reads the preface, and continues, "But to install them so that they will be electrically safe and mechanically secure involves the application of knowledge that has been gained accumulatively by hundreds of workers during many years of practice."

The purpose of the book is to supply explanations, elaborations and illustrations for those sections of the National Electrical Code to which it is necessary to refer most frequently. Among the subjects which are treated, according to the table of contents, are:

Outside work; services; wiring methods; conductors; outlet boxes and cabinets; automatic protection of circuits and appliances; grounding; rotating machinery and its control apparatus; transformers; switches; switchboards and panelboards; various kinds of fixtures; lamps; heating appliances;

resistance devices; storage or primary batteries; lightning arresters; radio equipment; signs and outline lighting; theatres; small isolated plants; systems.

"Wiring for Light and Power" is published by the McGraw Hill Book Company, 370 Seventh Avenue, New York City.

Annual Convention of N. E. L. A.

Forty-seventh Meeting and Exhibition to be Held at
Atlantic City on Million Dollar Pier, May 19-23

Arrangements are rapidly being completed for one of the greatest conventions ever held by the National Electric Light Association. As already announced in these columns the forty seventh convention and exhibition of the N. E. L. A. is to take place at Atlantic City from May 19 to 23.



M. H. AYLESWORTH
Managing Director, N. E. L. A.

The Million Dollar Pier has been selected as the scene for the convention activities, which will include the display of spacious and unique exhibits by the manufacturers of electrical machinery and allied products, central stations, associations and the electrical press.

Plans have been made with the several passenger associations in the United States and Canada to allow all delegates, including dependent members of their families, a reduced railroad rate of a fare and a half for the round trip on the identification certificate basis from all territories in both countries.

For the convenience of members and guests from the west, arrangements have been made with the Pennsylvania

Railroad to run a special train from Chicago to Atlantic City, with special Pullmans from Detroit and Cleveland, which all western delegates, their wives and guests are urged to use.

An unusually attractive entertainment program has been planned, and one of the features is the furnishing of music by Paul Whiteman's famous orchestra. It is hoped to have this orchestra play on every night of the convention and with Mr. Whiteman himself as the leader on at least one night. A special program has been provided for the ladies, which will include a golf tournament, croquet and putting contests, cards and Mah Jong games, and a fashion show.

One of the big features of the convention will be an address by Senator Arthur Capper of Kansas, at the meeting of the Public Policy Committee. Senator Capper, who is distinguished both for his statesmanship and his editorial ability accepted the invitation to speak at this convention in spite of many other pressing calls on his time.

The exhibits promise to be even larger than the optimism of the exhibition committee anticipated. The latest report from Director of Exhibits Shugg shows that the applications for space continue to come in to such an extent that he has been obliged to again contract for additional space on the pier to accommodate exhibitors. A considerable number of firms have been added to the Class D membership of the association, and these with an unusually large number of those already members who desire to exhibit, are taxing the resourcefulness of the director of exhibits in attempting to provide satisfactory space on the great pier.

Complete information on hotel and transportation arrangements has been mailed out to all members from the headquarters office in New York City, along with hotel reservation blanks and transportation certificates which will secure for members and their families

ORANGEBURG

Patent
app for

UNDERFLOOR DUCT SYSTEM

Provides for outlets

Anywhere:

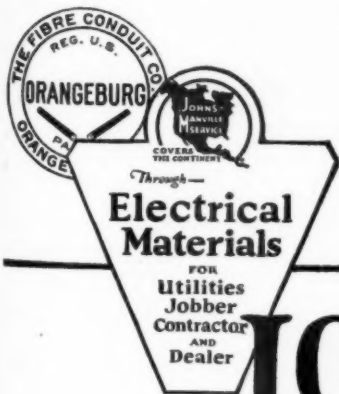
A grid of Orangeburg Under-floor Duct is embedded in the floor permitting the easy installation of electric wiring to reach any part of the floor.

Any time:

After the floor is laid and all your furniture and fixtures are in place your outlets can be installed by merely drilling down to the duct. Installing an outlet takes about fifteen minutes, and new ones can be put in at any time as the need arises.

For any service:

Electric light and power, city telephones, interior telephones, telegraph call boxes, annunciators, dictaphone wires—all are adequately concealed in this system.



JOHNS-MANVILLE

Sole Selling Agent

ELECTRAGISTS USE THE PRODUCTS OF ADVERTISERS IN THE ELECTRAGIST

JOHNS-MANVILLE Inc.

292 Madison Avenue at 41st Street, New York City

Branches in 62 Large Cities

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CO., Ltd., Toronto.

the reduced fare to and from the convention. No arrangements have been made for special trains from New York or vicinity to Atlantic City in view of the frequent train service between these points.

News Notes Concerning Electrical Contractor-Dealers

Business Changes, Store Improvements, and New Establishments Opened

Hudson Electric Company, formerly located at 29 North Fourth Street, Hudson, New York, has moved to 428 Warren Street, Hudson, where an electrical appliance business will be conducted.

Champion Electrical Supply Company announces its opening at 217 West Madison Street, Chicago, Illinois.

Apex Corporation will open a retail electrical supply store at 210 Broadway, Portland, Oregon.

Spring Grove Electric Company has established headquarters at Burlington, Iowa, where a complete line of electrical supplies will be carried. Incorporated capital, \$10,000. Incorporators: Walter Hilliard and others.

Paragon Electric Company, Incorporated, is featuring an extensive line of electrical supplies at Rockaway Beach, New York. Incorporated capital, \$10,000. Incorporators: D. H. Klein, 162 Beach 62nd Street, Rockaway Beach, and others.

Lockland Valley Electric Company has opened an electrical supply store at Lockland, Ohio.

Tresco Sales Company will conduct a radio and electrical supply business at Davenport, Iowa. Incorporated capital, \$10,000. Incorporators: W. H. Kirwan and others.

Howell Company, Incorporated, has established headquarters at 2976 Grand River Avenue, Detroit, Michigan, where a complete line of electrical supplies will be carried. Incorporated capital, \$25,000. Incorporators: G. H. Howell, 4017 Philadelphia Avenue, Detroit, and others.

Commonwealth Edison Company with main offices at 72 West Adams Street, Chicago, Illinois, has opened an electrical appliance store at Broadway and Wilson Avenue, Chicago.

Iron City Engineering Company, one of the oldest electrical contractors in the Pittsburgh district, has moved from the Frick Annex Building to 410 Union

Trust Building, Pittsburgh. Officers are: President, C. W. Ridinger; secretary-treasurer, W. I. Bickford; and manager, A. M. Cover.

Keystone Electric Company is conducting an electrical supply business at 150 East Second Street, Dayton, Ohio. Incorporated capital \$15,000.

Peckham-Gottburg Electric Company announces its opening at 393 Chili Avenue, Rochester, New York. Incorporated capital \$15,000. Incorporators: C. J. Peckham, 81 Post Avenue, Rochester, and others.

Hermon Electric Company will conduct an electrical contracting business at 4051 West 20th Street, Chicago, Illinois. Incorporated capital, \$20,000. Incorporators: James W. Hermon and others. Correspondent: W. F. Cunningham, 10 South La Salle Street, Chicago.

Monmouth Sales Company has established headquarters at Newark, New Jersey, where an up to date line of electrical merchandise will be handled. Incorporated capital \$25,000. Incorporators: W. J. McFadden, 776 Broad St., Newark, and others.

Havens Electric Company, Incorporated, in the electrical supply business at Hudson Avenue and Beaver Street, Albany, New York, will improve and enlarge its building to cost about \$36,000. Work to start at once.

Schokmiller & Franke, Incorporated, are engaged in the electrical supply business at 3914 Minnesota Avenue, St. Louis, Missouri. Incorporated capital, \$40,000.

Warren Electrical Company has located at 5 Bridge Street, Paterson, New Jersey, where an electrical supply business will be conducted. Incorporated capital \$25,000. Incorporators: A. J. Ghesquier, 31 Butler Street, Paterson, and others.

Amplifex Radio Corporation announces its opening at Arlington, Massachusetts, where an extensive line of radio supplies will be carried. Incorporated capital, \$30,000. Incorporators: J. F. Stacey, president, Arlington, and others.

Victor Radio Shop has established headquarters at Paterson, New Jersey. Incorporated capital, \$40,000. Incorporators: Harry Pletman, 272 Market St., Paterson, and others.

Rieger-Bailey Company of America, Incorporated, is engaged in the electri-

cal supply and radio equipment business at Philadelphia, Pennsylvania. Incorporated capital, \$25,000. Incorporators, George Rieger, Jr., 1024 W. Upsal Street, Philadelphia, and others.

Willison Electric Company will conduct an electrical supply business at Bandon, Oregon. Incorporated capital, \$50,000. Incorporators: George P. Topping and others.

Electric Illuminating and Equipping Company is locating at Chattanooga, Tennessee, where a complete line of electrical supplies will be handled. Incorporated capital, \$50,000. Incorporators: A. C. Foust and others.

Charleston Electric Supply Company announces its opening at Clarksburg, West Virginia. Incorporated capital \$50,000. Incorporators: J. M. Cameron, Clarksburg, and others.

Gardner & Babcock, Incorporated, have opened an electrical contracting and fixture business at 19 Washington Place, East Orange, New Jersey. Incorporated capital, \$50,000. Incorporators: Walter Gardner, and others.

Young Electric Shop will conduct an electrical supply business at 115 North Eighth Street, Richmond, Virginia. Incorporated capital, \$50,000. Incorporators: W. C. Young, Richmond, and others.

Northwest Radio Service Company has established headquarters at Seattle, Washington. Incorporated capital, \$100,000. Incorporators: Herr, Bayley and Croson, Leary Building, Seattle.

Sluter Electric Company is engaged in the electrical supply business at 421 Macdonald Avenue, Richmond, California.

Business Principles

Various speakers at a lively convention of the Ohio Retail Grocers' and Meat Dealers' Association offered these suggestions for a successful business:

1—Make the work of salespeople interesting and profitable. Educate them to be better salesmen.

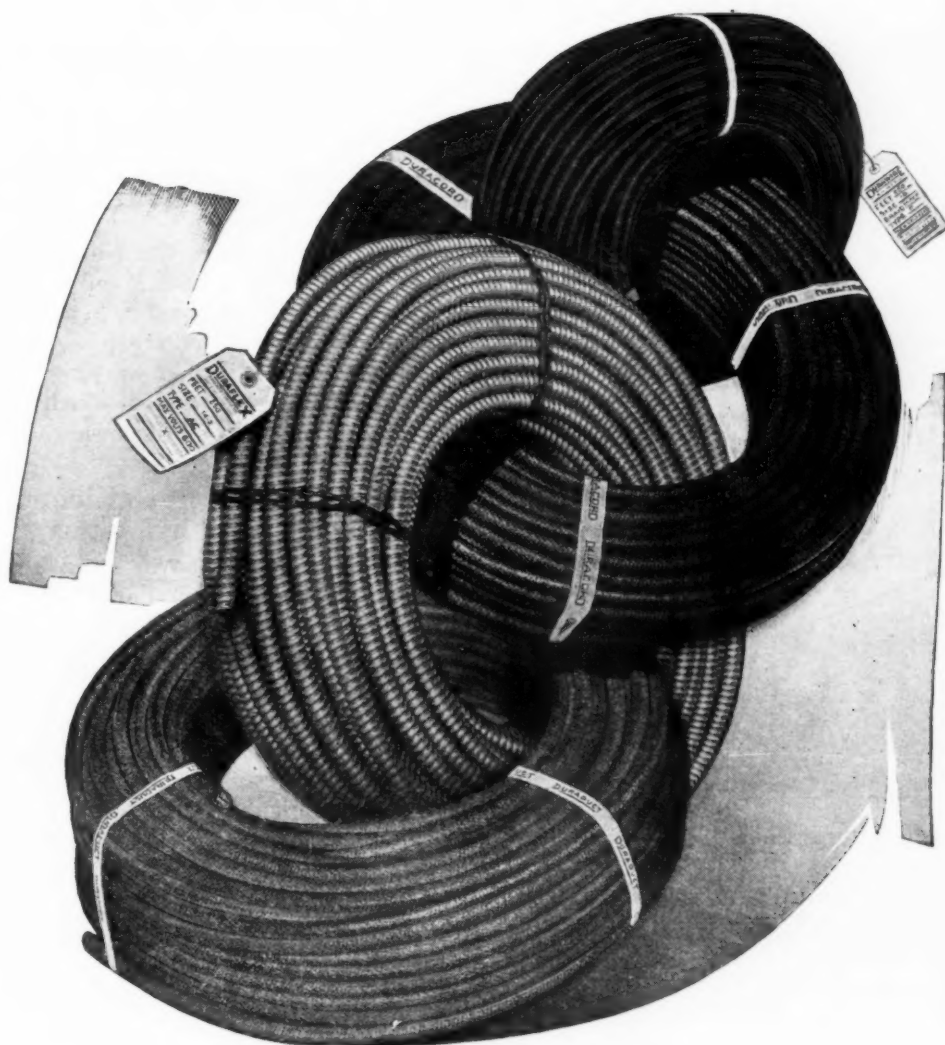
2—Give such good service to your customers that you will hold old customers and get new ones.

3—Keep inventories low and stock turnover high. Buy goods that will sell quickly and eliminate dead stock.

4—Check charge accounts closely and keep accurate records of every outstanding account.

5—Learn what others in our line of business are doing.

6—Read trade papers, associate with other merchants and broaden your knowledge of the business.

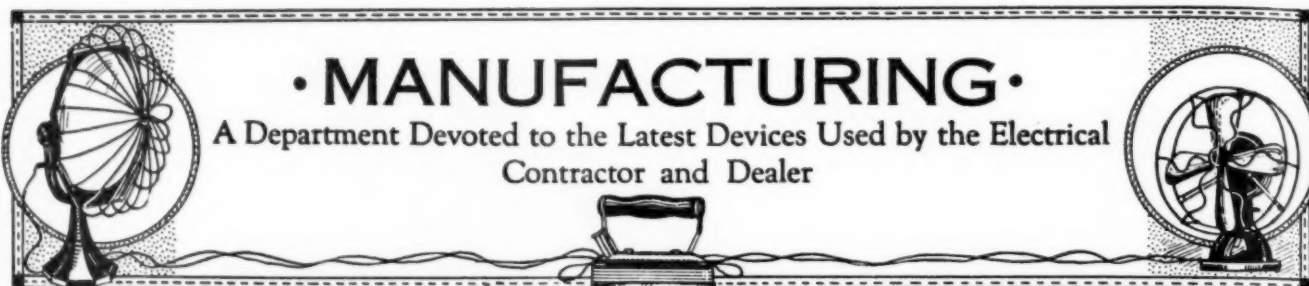


The Strong Chain of—

DURABILT PRODUCTS

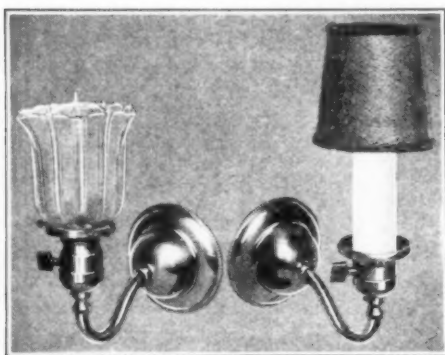
..
DURAWIRE
DURACORD
DURAFLEX
DURADUCT
..

Made at PAWTUCKET, R. I., by THE TUBULAR WOVEN FABRIC COMPANY



Weber Fixture Unit

Henry D. Sears, general sales agent for Weber Wiring Devices announces a new Weber device under the trade name of Can-del-ite, the purpose of which is to give old fashioned fixtures



the appearance of candle fixtures which are now so much in vogue.

Can-del-ite consists of two parts: A bobèche which slips down over any standard lamp socket and rests against the edge of the socket cap with which it is uniform in diameter; and a candle extender, the tube of which is lengthened until it is flush with the center contact of the male thread, so that when the Can-del-ite is screwed into the lamp socket, the bottom end of the tube meets the bobèche. The entire socket body is thereby concealed and the socket cap appears to be a part of the bobèche.

Can-del-ites are put up in counter display boxes and other sales helps are supplied to dealers.

Single Receptacle

A new single receptacle of the "pony" type is a development of the Beaver Machine & Tool Company, Inc., of Newark, N. J. Its main advantages are shallowness, being only 3/4 inch from box



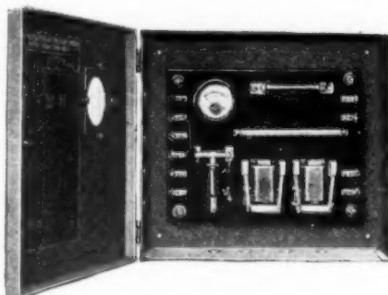
face to rear insulation; polarized slots, accommodating tandem and parallel blades; and large binding screws in well threaded holes.

As the illustration shows, this device is of the side wiring type and is made with a full length block of insulation which prevents the metal strap from bending as happens when these devices are made with only a cylindrical piece of composition.

Fire Alarm System

A new Closed Circuit General Alarm, 110-220 volts, A. C., D. C., or battery, designed for use with the general alarm code closed circuit supervised fire alarm system, has been placed on the market by the Signal Engineering & Mfg. Company of New York City. By a pull of the box every signal device operates, thus a general alarm is given corresponding with the number of the station.

The entire system including the boxes, signal devices, control panel, and every inch of the wire, is under constant elec-



trical supervision. The trouble bell will sound causing an alarm upon the failure of current, grounds, or short circuits.

Laminated silicon steel magnetized; phosphor bronze dead beat contact arms; self supporting, form wound, impregnated, moisture proof coils; wiping, self cleaning pure silver contacts—these properties compose the control relays. Since there are no springs or electro mechanical complications employed, the relays for the A. C. make a contact as dependable as for the D. C.

The time delay cutout switch, which is of thermostatic principle, can be set to cut off the current automatically at any desired time should an excess amount of current flow through any circuit due to grounds or short circuits.

The panel is of unbreakable, moisture proof insulating material and is mounted in a steel cabinet having ample gutter space. Knockouts are provided on four sides. The door has a glass window which permits the reading of milliammeter. A lock is provided.

Electric Cord Set

The Simplex Electric Heating Company, Cambridge, Mass., has developed a new plug for irons and appliances. It is claimed that the plug, which is of nickel steel, is unbreakable. A Bakelite ball grip makes it easy to connect



and disconnect the appliance. It is stated that the steel spring contacts have been tested with loads of 600 watts, making and breaking the circuit 60,000 times. Six feet of highest quality heater cord and a Bakelite lamp socket plug are furnished. The new cord sets are packed separate in 3 color cartons, 12 to a display container.

New Hubbell Units

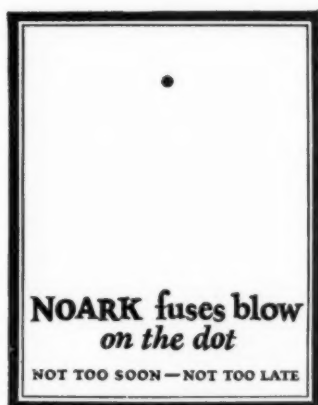
Harvey Hubbell, Inc., Bridgeport, Conn., announces a new line of pull receptacles for metal signs, ceiling fixtures and outlet boxes. These recepta-



cles are equipped with removable skirted rings which hold the receptacles in place and at the same time insulate the screw shells from the metal fittings. They are furnished with different lengths of chain or cord, with or without chain insulator.

*All Noark Fuses
blow on the dot* ●

*They are
individually tested
at the factory*



THE JOHNS-PRATT COMPANY, 160 Huyshope Ave., Hartford, Conn.
Division of Colt's Patent Fire Arms Mfg. Company

Export Department, 30 Church St., New York, N.Y., U.S.A.

BOSTON NEW YORK CHICAGO SAN FRANCISCO

Johns-Pratt

J-P

has the ability
and capacity
to serve you
in NINE ways



NOARK Fuses

1



NOARK Fuse Clips and
Bases

2



NOARK Service and Sub-
way Boxes

3



ALL-SAFE Switches

4



NOARK Universal Service
Entrance Switches

5



Railway and mine mater-
ial, hangers, insulators, etc.

6



J-P molding service—con-
tract basis

7



VULCABESTON Packing
—sheet, rope, braided

8



J-P molded radio parts—
from stock

9



This company also announces a new pull chain extender for kitchen units. This device is equipped with a pull



cord of suitable length and prevents the receptacle pull chain from chafing or jarring the glass fixture bowl. The illustration shows the extender attached to a kitchen unit.

New X-Ray Reflectors

A new reflector known as No. 52 has been placed on the market by the Pittsburgh Reflector & Illuminating Company of Pittsburgh for show window lighting. Although designed specifically for use with the 200 watt type C lamp, it can also be used with the 100 or 150 watt type C lamp, by substituting the proper holder adapter, in-



stead of the one shown, without changing the distribution of the light.

This reflector is employed in connection with the ordinary form 0 2 1/4 inch holder. It will do the best work in show windows where the distance from glass to background is half or less the distance from the floor to the point where the reflector is mounted. Since its bottom is level when properly installed, it is particularly adapted to those windows where it is necessary to install the reflectors above the ceiling.

Other new units are announced by this company as improvements on the units which have been marketed under the names of Flood-O-Lites Nos. 1 and 2. Perhaps the greatest improvement is in the mounting.

The bracket consists of the extension arm with a ball and socket joint at each end, making it possible to direct the

spot to any point within more than a half sphere. Convenient to install, the wall flange can be readily detached by loosening the thumb screws so that the flange can be screwed to the wall, ceiling, floor, or a portable base, without the balance of the unit being in the way.

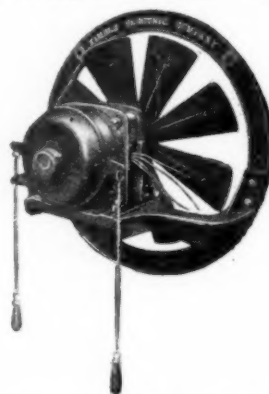


The reflector is of double plated silvered glass, the silver being protected between the glass and a copper backing, and is finished in enamel. It is guaranteed.

Ventilating Fan

The Kimble Electric Company, Chicago, has placed on the market a variable speed, reversible, ventilating fan for alternating current service. A specially designed repulsion type motor of high efficiency is used.

The speed is regulated by shifting the brushes on the commutator of the motor by means of two pendant chains attached to the rocker arm. These same



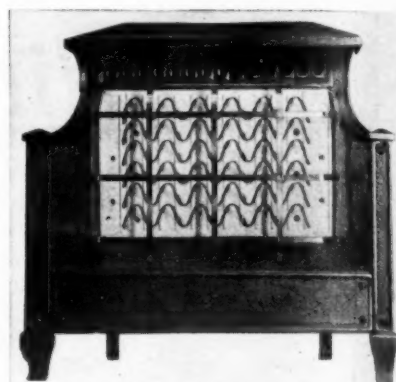
chains reverse the fans as well. The fan can be controlled through resistance when remote control is essential.

The variable speed feature makes the equipment ideal for the ventilation of restaurants, theatres, hotels, club houses, factories, etc., because the volume of air moved can be adjusted to exactly meet ideal conditions.

Adjustment of the chains converts the fan from an intake to an exhaust fan or vice versa, and it is said to be equally efficient for either use.

Room Heater

A new electric heater, known as the Solar Glow, suitable for use as a room heater and as an auxiliary heater in extremely cold climates has been recently placed on the market by the Westinghouse Company. It is a combination of both the convection and radiation type, for in addition to heating through the utilization of air currents, radiation is effected from a buffed copper reflector placed around the



heating element. This combines the uniform heating ability of the convection heater with the cheerfulness of the radiant type.

The Solar Glow has a cast iron frame faced with statuary bronze. It is finished on the sides and back in antique bronze so that it may be placed in any part of the room as well as inside a fireplace. The heating element, designed for operation on standard domestic circuits, consists of wire coils staggered in a one piece porcelain unit and protected by a removable guard. The heat is regulated by a conveniently located switch, giving three different degrees of temperature control.

Portable Drill

"Try to stall it" is the slogan which is attached to a portable electric drill recently placed on the market by the General Electric Company.

A special series wound motor built so that the torque varies inversely with the speed and makes stalling the machine practically impossible even under the most severe working conditions.

Gears on the drill are made of heat treated alloy steel, and run in grease. The control switch is located under the



"It adds safety and cuts expense"

The Man In Charge of Motors said:

"When all of our motors have this kind of a switch our rewinding bills will drop to the lowest notch."

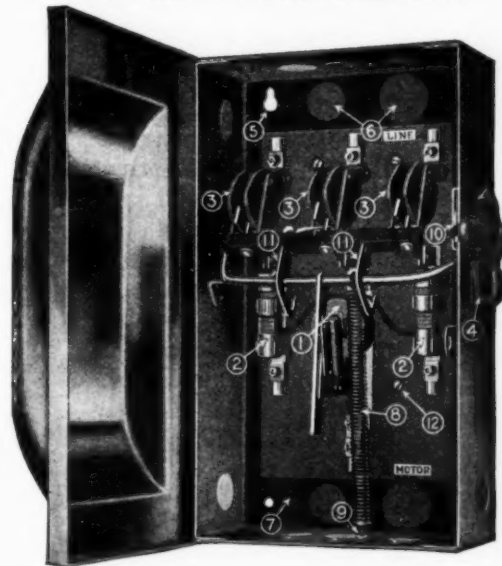
The switch in question is one of the new line of "Circle T" Type A Motor Starting Switches, graphically described in the illustration shown below.

Positive Motor Protection Equipped with Overload Relays and Under Voltage Release Coil

The Overload Relays allow ample starting time and permit sufficient temporary overloading, but will trip out the switch before the motor is endangered. The relays are installed like cartridge fuses, but the clips are so spaced that a cartridge fuse cannot be substituted.

The Under Voltage Release Coils are of simple, magnet-type construction and can be adjusted to trip the switch open at any desired voltage limit. Both coils and relays are inside the switch-box, which is of the standard Type-A construction. You can get all the details from the new Motor Starting Switch Bulletin—get it today.

Special features of this new type motor starting switch are numbered and explained below.



- | | |
|-------------------------------------|---|
| 1—Under Voltage Release Coil. | 6—Large variety knockouts. |
| 2—Overload Relays. | 7—Ample wiring room. |
| 3—Snuff-Arcs on 440, 550 V. A. C. | 8—Opening spring. |
| 4—"Locking Off" Shelf. | 9—Adjustable spring anchor. |
| 5—Button hole for fastening screws. | 10—Interlocking catch. |
| | 11—Quick Break Springs. |
| | 12—Entire switch easily removed from box. |

Send for "Circle T" Bulletin No. 5.

The Trumbull Electric Manufacturing Company, Plainville, Conn.

NEW YORK
114 Liberty Street.

BOSTON

CHICAGO
2001 W. Pershing Road.
PHILADELPHIA

SAN FRANCISCO
595 Mission Street.

ATLANTA



"The Industrial Standard for More Than 20 Years"

operator's thumb, is simple in design and avoids arcing. The Speed Way drill is manufactured in several sizes for varied demands.

Another Simplex Iron

The Simplex Electric Heating Company, Cambridge, Mass., has recently brought out an iron with original features. The handle is a departure from the ordinary wooden handle. It is of green Bakelite moulded to fit the hand. It has finger guards at either end and is secured by screws threaded into brass inserts which are cast in the Bakelite in the moulding process.

The heating element is the Nichrome enclosed coil type and is equipped with a new cord set a feature of which is the all steel unbreakable plug which cannot chip or crack and is unaffected by heat. A Bakelite ball grip for con-



venience in inserting and removing the plug is mounted on the anti kink spring. It is claimed that when this ball grip is used for removing the plug, the recoil of the spring between it and plug snaps the plug from the iron, eliminating excessive arcing and consequent burning of the contacts. Instead of the usual brass or bronze, the contact springs of the new plug are of finely tempered steel. A two piece lamp socket plug of green Bakelite to match the handle of the iron is provided.

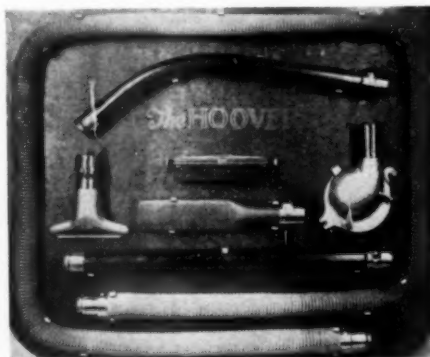
New Cleaner Attachments

The Hoover Company of North Canton, Ohio, recently placed on the market a new set of air cleaning attachments which are almost entirely redesigned and incorporate several features on which patents are pending. Among them are scientifically designed joints which eliminate obstructing shoulders, making possible a smooth and powerful flow of air, thus increasing the cleaning efficiency.

Swivel joints are provided which permit free use of the attachments around corners and in other hard to get at places without causing strain upon the hand of the operator. A spring catch lock in the joints obviates the possi-

bility of accidentally disconnecting the attachments while they are in use.

A further convenience is the newly improved nozzle brush attachment. It is provided with a heavy rubber bumper which prevents the marring of walls and highly polished surfaces of furni-

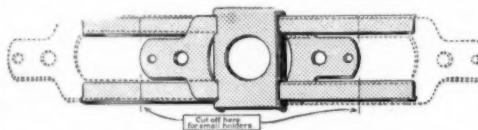


ture when it accidentally comes into contact with them.

The attachments are now seven in number whereas there were eight before. This reduction has been accomplished by constructing a converter which serves for both suction and blower use. Other attachments are a flexible hose, a straight and a curved tube, a flat fibre radiator nozzle and the aluminum nozzle to which the soft hair brush can be attached when desired.

Peerless Developments

The Peerless Light Company of Chicago announces the development of an



Adjustable Fixture Strap and a luminaire with an adjustable decorated glass shade.

The Adjustable Fixture Strap, illustrated, is adjustable to any length from



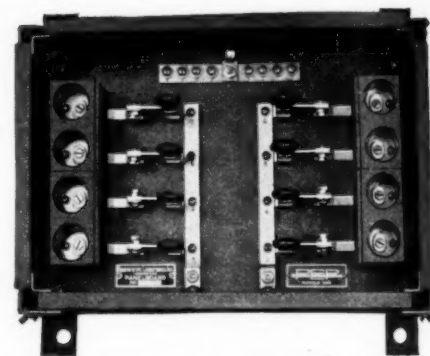
3 5/8 inches to 8 inches. It is made of heavy gauge steel and is intended to fit any kind of box or stud in connec-

tion with ceiling holders and wall brackets.

The luminaire, also illustrated, is known as the Peerlite 9320 and comes with an adjustable decorated glass shade—ivory blue or ivory pink with shade colors to match. Its height is 15 inches with a shade diameter of 5 inches. The company announces a special introductory offer on this unit.

1923 Code Panels

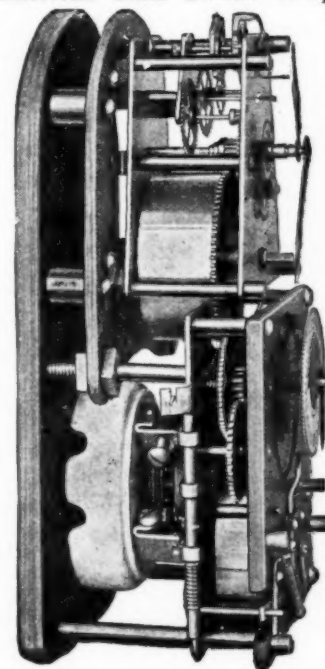
The Plainville Electrical Products Company, Plainville, Connecticut, are supplying panels to meet the requirements of the 1923 Code. These panels are constructed with single pole fused branch circuits. The identified wires



of the system are connected solid to a busbar at the top of the panel. A lug is supplied for connection to the main grounding conductor. These panels may be obtained in the safety type or live front both 3/2 and 3/3 wire.

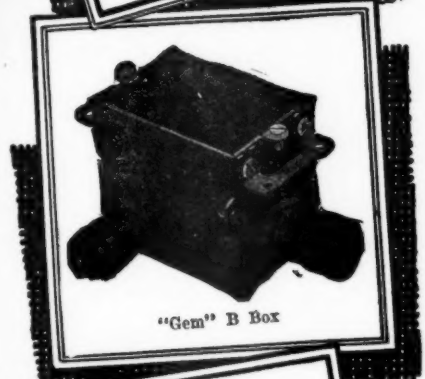
New Time Clock

After several years of experimenting, the American Time Switch Company,





Both Mean "Standard"



The word "Sterling" stamped on silver means "Sterling Quality"—it is your protection against cheap silver substitutes. Like the word "Sterling," the name "Gem" on the green cartons in which "Gem" Switch Boxes are packed, is your *guarantee against inferior boxes.*

Scientific design, highest grade materials, ultra-thorough workmanship and conscientious inspection are the steps by which these famous boxes won their reputation as the "Standard" make and by which they have maintained that reputation for more than 22 years.

There are "Gem" Sectional Switch Boxes designed to meet every requirement for both old and new work.

Send for our big illustrated catalog No. 29.

Notice to Jobbers and Dealers

"Gem" Switch Boxes are protected by U. S. Letters Patent. Beware of imitations. All infringements will be vigorously prosecuted. The genuine boxes bear our trade mark "Gem" and are packed in individual green cartons bearing the name.

CHICAGO FUSE MFG. CO.

Manufacturers also of Cut-out Bases, Fuse Plugs, Fuse Wire, Automobile Fuses, Renewable and Non-renewable Fuses.

CHICAGO

NEW YORK



GEM

SECTIONAL SWITCH BOXES

Covered by U. S. Patents Nos. 950,502 March 1, 1910, and 1,016,925 Feb. 13, 1912

Cleveland, recently perfected and put on the market a Time Switch Clock that contains many features and improvements. The American, as it is known, is of sturdy construction and except for winding once every eight days, requires no attention.

By means of separate timing and switch control units, each individually wound, stress and strain is eliminated from both elements, especially at the time the current is automatically turned on or off. Extra heavy double strength main springs prevent over winding. The timing element is of special design, containing all machine cut gears. The hair spring spindle oscillates in especially centered sapphire jewelled bearings with its movement actuated by a well known type of escapement.

A small dial, marked off into day and night periods of twelve hours each, with each hour space subdivided into quarter hour periods, permits a quick and accurate means for setting the time switch to function at any predetermined instant. A single key winds both the timing and switch units and is also employed for locking the door of the clock.

Expanded Steel Guards



New guards for Mill Type Lamps being manufactured by the Flexible Steel Lacing Company of Chicago are especially designed for the new 25 and 50 watt type lamps. These guards, made of expanded steel, reinforced, tinned, strong and serviceable, prove an effective protector.

There are guards of two kinds, key locking and non locking. One key is furnished to each dozen guards of those which are key locking. The non locking guards close with slotted round head screws.

Automatic Starter

A new automatic starter has been placed on the market by the General Electric Company. It is designed for use with spring induction motors and is generally similar to the starter for squirrel-cage motors, recently put on the market.

The new unit utilizes the same case, contactors, timing device and double-pole overload relay, but the accelerating contactor and starting resistor are

in the secondary circuit of the motor, and three extra terminals are provided for connection to the motor secondary.

Condensed Notes of Interest to the Trade

A merchandising plan for dealers has been prepared by the Apex Electrical Distributing Company of Cleveland. The broadside which describes it shows newspaper advertisements to run, a specially written letter to go to individuals, a four page folder, and a circular post card setting forth the company's products.

Among its trade literature the Frank Adam Electric Company of St. Louis has the following for distribution: Catalogs on panelboards and steel cabinets, and knife switches and accessories; and bulletins on panelboards and cabinets, residence safety type panelboards, and fan hanger outlets and floor boxes.

Henry D. Sears, general sales agent for Weber Wiring Devices, announces that a complete line of 5 ampere, single pole snap switches has been added to that line. These switches are of the conventional type with and without indicators, some having metal covers with black composition handles, and others porcelain covers with porcelain handles. There are also similar three point switches.

Arrangements have been completed whereby the Killark Electric Manufacturing Company of St. Louis is to be represented in the states of Louisiana, Mississippi and Alabama by H. W. Stansbury & Co., Inc., Audubon Bldg., that city.

M. H. Hallenbeck, formerly sales engineer for the Westinghouse Electric & Mfg Company at Boston has recently become district manager of the Allen-Bradley Company of Milwaukee, Wisconsin, and with offices in the Compton Bldg., will represent this firm in the New England territory.

Service and repair shops are announced by the General Electric Company—in addition to those maintained at all the company's factories—at the following places: Atlanta, Chicago, Los Angeles, New York, Kansas City, Minneapolis, Oakland, Philadelphia, St. Louis and Seattle.

The Alphaduct Company, Jersey City, N. J., formerly conducted as a copart-

nership under the same name, announces that it has incorporated as of April 1, all assets and liabilities of the retiring copartnership being assumed by the new corporation as of this date.

A booklet designed for its dealers has been completed and issued by the Hoover Suction Sweeper Company of North Canton, Ohio. It is entitled, "I am Your Business," and is written in a personal, narrative style giving the reader a clearer understanding of turn-over and overhead, etc.

The Century Electric Company of St. Louis announces the issuance of a new bulletin, known as No. 36, on its line of alternating and direct current fans. It is attractively printed and contains actual photographs.

A poster for hanging has been issued by Henry D. Sears of Boston, setting forth the new Can-del-ite development of the Weber line. It is in colors and shows how the unit transforms old fixtures into up-to-date luminaires.

The Chicago Fuse Manufacturing Company has announced a reorganization which includes the purchase by its president, W. W. Merrill, of the remaining block of stock held by A. D. Dana of New York City, until recently chairman of the board, who has been inactive in the management of the company's affairs for a number of years.

New appointments are announced by the Goldschmidt Corporation, manufacturer of radio products, as follows: Harry Kamen, New England district manager, and John B. Price, New York district manager, supervising territory in northern New Jersey, greater New York state, and Long Island.

The formal opening of the new factory of Brandes Limited in England was celebrated recently at a dinner held in the Engineers Club of London, at which were present Frederick Dietrich, president of C. Brandes, Inc., and head of the English organization, C. E. Brigham, chief research engineer of the American Brandes interests, Managing Director Bartlett and other officials of the English company, and representative jobbers of the British Isles.

The Benjamin Electric Mfg. Co., Chicago, is increasing its outside sales force by the addition of a number of junior salesmen in the larger districts, who will be under the direct supervision of the district manager.